Environment Canada Environnement Canada

Forty - Eighth
Federal - Provincial
Wildlife Conference

TRANSACTIONS
1984

Timmins, Ontario
19 June - 22 June

4299/

DATES, SITES, AND THEMES FOR FEDERAL-PROVINCIAL WILDLIFE CONFERENCES

1922-1954	Ottawa, Ontario
1955	Montreal, Quebec
1956	Vancouver, British Columbia
1957	Ottawa, Ontario
1958	St. John's, Newfoundland
1959	Ottawa, Ontario
1960	Regina, Saskatchewan
1961	Ottawa, Ontario
1962	Fredericton, New Brunswick
1963	Ottawa, Ontario
1964	Charlottetown, Prince Edward Island
1965	Winnipeg, Manitoba
1966	Quebec, Quebec
1967	Ottawa, Ontario
1968	Whitehorse, Yukon Territory
1969	Edmonton, Alberta
1970	Yellowknife, Northwest Territories
1971	Toronto, Ontario
1972	Dartmouth, Nova Scotia
1973	Ottawa, Ontario
1974	Victoria, British Columbia (People and wildlife)
1975	St. John's, Newfoundland (Wildlife values)
1976	Fredericton, New Brunswick (Federal-provincial initiatives in wildlife management)
1977	Winnipeg, Manitoba (Wildlife enforcement in Canada)
1978	Quebec, Quebec (Use of wildlife)
1979	Regina, Saskatchewan (Habitat is the key)
1980	Ottawa, Ontario (A national policy on wildlife)
1981	Charlottetown, Prince Edward Island (A national policy on wildlife - Phase II)
1982	Whitehorse, Yukon Territory (Wildlife in Canada's North)
1983	Edmonton, Alberta (Wildlife management - Today and tomorrow)
1984	Timmins, Ontario (Team-work in wildlife management)
1985	Halifax, Nova Scotia (Communicating about wildlife)
1986	Ottawa, Ontario
1987	Yellowknife, Northwest Territories

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Transactions of the
Forty-eighth Federal-Provincial Wildlife Conference
held in Timmins, Ontario
19-22 June
1984

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SUMMARY OF THE 48TH FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

Conference opening

J. Douglas Roseborough, Director, Wildlife Branch, Ontario Ministry of Natural Resources, was the Chairman of this year's conference. Mr. Roseborough expressed pleasure at being Chairman, and credited all 13 members of the Program Committee with the direction and planning of the program. He then introduced his Minister, the Hon. Alan W. Pope, who began his active political life in Timmins in 1969. He mentioned that Mr. Pope had been Minister of Natural Resources since 10 April 1981, and that his accomplishments since that time have been quite remarkable.

Mr. Pope welcomed delegates to his home town of Timmins. He said that northern Ontario depended significantly on its natural resources, including wildlife; that the entire economy and "what makes Ontario drive economically" was its resource base, and that resource base was situated in northern Ontario. He was happy that the theme of the conference involved working together in managing a fascinating living resource. He then gave a short history of Timmins and introduced the Mayor, His Worship Victor Power.

Mr. Power also spoke briefly on the history of Timmins. He welcomed delegates, saying that the team-work theme of the conference was very important to the people of Timmins because they were anxious to preserve wildlife in its natural state.

Mr. Pope then welcomed several provincial ministers who were present including: the Hon. Howard Tracey, Minister of Renewable Resources, Yukon Territory; the Hon. Kenneth Streatch, Minister of Lands and Forests, Nova Scotia; and the Hon. Nellie Cournoyea, Minister of Renewable Resources and Information, Northwest Territories.

1. Presentation of the agenda

Mr. Roseborough explained that the Program Committee, in organizing the program, had aimed for the maximum amount of participation, not only by ministers, deputy ministers, and directors of wildlife, but by non-governmental organizations (NGOs) who had faithfully and diligently participated in conferences for the past 10 years. The committee felt that workshops on both Wednesday and Thursday would allow for maximum participation.

2. Appointment of Recommendations Committee

Members of the Recommendations Committee included: Merrill Prime, Nova Scotia Wildlife Division (Chairman); Wayne Roddick, Information Services, Environment Canada (Secretary); Bob Bell, Northwest Territories Department of Natural Resources; Douglas Hagan, Ontario Wildlife Branch; D. Stewart Morrison, Ducks Unlimited Canada; and Lance Males, Ontario Federation of Anglers and Hunters.

3. Representatives to National Waterfowl Advisory Committee

Bert Tétreault, Canadian Wildlife Service (CWS), announced that the provincial representatives to be part of the Canadian delegation at the National Waterfowl

Advisory Committee meetings in Washington, DC, were J. Douglas Roseborough, Ontario, and Bob Andrews, Alberta. He explained that these meetings dealt specifically with the subject of regulations on a continental basis.

4. Report of action taken on 1983 conference recommendations

The Conference Secretary, Doug Pollock, reported that Recommendations Nos. 1 to 5 covered letters of appreciation for hosting various events and letters to non-governmental agencies for sending representatives to the conference. Action completed.

Recommendation No. 6 concerned a letter of regret sent to British Columbia concerning the absence of their representative from the conference.

Recommendation No. 7 concerned the establishment of the Fur Institute of Canada. A report is included in these transactions.

Recommendation No. 8 asked that the federal and provincial agencies accelerate their efforts in developing co-operative arrangements with industry and/or private conservation agencies to enhance habitat preservation. A report is included in these transactions.

Recommendation No. 9 concerned measuring wildlife values among people residing in northern British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Newfoundland, and the Yukon Territory. A report is included in these transactions.

Recommendation No. 10 dealt with the comprehensive analysis of the "1981 National survey on the importance of wildlife to Canadians". A report is included in these transactions.

Recommendation No. 11 concerned the dissolution of the committee struck to develop a "National habitat strategy". The Committee was informed that they had been officially dissolved.

Recommendation No. 12 concerned the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). Jurisdictions confirmed the original mandate of COSEWIC and directed that the work on plants should be continued. COSEWIC was encouraged to pursue a broad spectrum of financial support. A report is included in these transactions.

Recommendation No. 13 dealt with the theme for National Wildlife Week for 1984, which was "Wildlife and wetlands".

Recommendation No. 14 concerned "Canadian wildlife administration". Manitoba published the 1984 edition. An update report is included in these transactions.

Recommendation No. 15 concerned the establishment of a Canadian Wildlife Management Institute. A report is included in these transactions.

Recommendation No. 16 dealt with guidelines for co-ordinated and co-operative ways in which governments and NGOs could deliver the National Wildlife Week program. The guidelines were for operation on a test basis as early as 1984. A report is included in these transactions.

Recommendation No. 17 concerned appreciation of NGOs. Jurisdictions were made aware of NGOs' feelings on being allowed to participate in the conference.

Recommendation No. 18 was a letter of appreciation sent to Alan Loughrey for his service for 30 years, and best wishes were offered for his retirement.

5. Definition of the role of delegates, guests, and participants

The role of delegates, guests, and participants was discussed at the Wildlife Directors' Meeting, 18 June. They reaffirmed the terms of reference written for the conference in 1972, as follows:

(1) Official voting delegate. One from each province and territory and CWS.

(2) Participant. To include members of provincial game agencies, CWS, RCMP, and personnel from other provincial or federal government departments.

(3) Official representative. To include representatives of national non-governmental bodies, such as Ducks Unlimited, Canadian Wildlife Federation, and Canadian Nature Federation, and representatives of foreign governments, such as the US Bureau of Sport Fisheries and Wildlife.

(4) Guest. To include all other participants not included in the above three categories. Guests would be invited on an annual basis as required by the program content of each conference.

Only official delegates have the right to vote on recommendations. Participants, official representatives, and guests are welcome to participate in all other sessions of the conference, unless they are designated as closed sessions.

6. Theme for 1985 conference

The theme for the 49th Federal-Provincial Wildlife Conference is "Communicating about wildlife".

7. Program Committee membership for 1985

The 1985 Program Committee will consist of: Merrill Prime, Nova Scotia Wildlife Division (Chairman); Douglas Pollock, CWS (Secretary); Bob Bell, Northwest Territories Department of Natural Resources; Jim Inder, CWS; Rich Goulden, Manitoba Wildlife Branch; Art Smith, Prince Edward Island Fish and Wildlife Unit; and representatives of national and local non-governmental organizations. Bob Andrews, Alberta Fish and Wildlife Division, is the alternate.

8. "Canadian wildlife administration"

The delegates confirmed that "CWA" was as much needed today as when it was introduced in 1975, and that it should be continued. Editorial policy and publishing specifications are to be crystalized for review by all jurisdictions and relevant NGOs, and circulated during 1984-85 with the aim of adoption at the 1985 Federal-Provincial Wildlife Conference. Manitoba is to lead this task,

assisted by CWS and such other jurisdictions as may be required. Alberta is to publish the journal in 1985.

9. Update and discussion on National Wildlife Week

In introducing the Review Committee's report, Laurel Whistance-Smith commented:

> "I must emphasize that the 35 recommendations are not meant to slight any of the efforts made in the past by any of us, and particularly not the efforts of the Canadian Wildlife Federation, who have carried the ball in this program so well on our behalf. However, as we identified last year, there are areas where there is room for improvement, and these recommendations are the committee's suggestions about how we can all work to improve the effectiveness of this important program. The spirit in which the guidelines are offered is positive and constructive."

Ken Brynaert, Canadian Wildlife Federation, expressed displeasure at some of the recommendations contained in the report. After some discussion among committee members and Mr. Brynaert, the report was amended. Both the original report and the amended version are included in these transactions.

10. Update and discussion on Canadian Wildlife Management Institute

Dr. Louis Lemieux, Diomedea Consultants, was hired under contract to prepare a report and make recommendations respecting a framework for the establishment of a "Wildlife Management Institute". The Task Force is to continue and present a report to all jurisdictions and NGOs by January 1985. Dr. Lemieux's report is included in the transactions.

11. Choice of theme for National Wildlife Week - 1985

The theme for 1985 is "The key to conservation - responsible stewardship".

12. Update on the "Value of wildlife to Canadians"

Jean Cinq-Mars gave a brief summary of action taken to date. Jurisdictions are to inform CWS by 15 July of the amount of funds they are able to commit to the comprehensive analysis of the "National survey on the importance of wildlife". J. Cinq-Mars' report and a more detailed report by Fern Filion are included in these transactions.

13. Forestry/Wildlife Symposium update

Chuck Dauphiné reported that the symposium had been held at the University of British Columbia, 7 to 10 May 1984, and that the proceedings would be published as a dedicated issue of the "Forestry chronicle". Mr. Dauphiné's summary is included in these transactions. Ontario is looking into the possibility of hosting a second symposium in 1986.

14. Update on Fur Institute of Canada

Ron Daniel outlined the activities of the Institute and the membership to date. His complete report is included in these transactions.

15. Update on Wildlife Habitat Canada

Dave Neave commented on the status of the Foundation and Jim Patterson, Chairman of the Nominating Committee, spoke on the status of appointments to the Board.

16. Highlight reports

Eight provinces and the two territories, as well as CWS, submitted highlight reports. New Brunswick and Newfoundland were the only provinces that did not submit reports. Reports were also received from national NGOs and the US Fish and Wildlife Service (USFWS). These reports are all included in these transactions.

17. Keynote speech

The Hon. Alan W. Pope, Minister, Ontario Ministry of Natural Resources, was our keynote speaker. He stressed that the most important commitment partners could make in wildlife management was a commitment to maintaining trust. Failure to communicate clearly could harm a shared venture. He pointed out our need for a system that educated and made people aware of the value of wildlife, and caused them to get involved. He thought the conference should undertake to produce guidelines to help everyone take advantage of shared wildlife management experiences in Canada. His entire speech is included in these transactions.

18. Panel - Case studies of team-work

The chairman of the panel was John A. Sloan, Deputy Minister, Ontario Ministry of Natural Resources. Panel members included: the Hon. Nellie Cournoyea, Minister of Renewable Resources and Information, NWT; Michel Cantin, Director, Wildlife Areas Division, Quebec; Ron Cockerill, Ducks Unlimited Canada; and Alcide Giroux, President, Ontario Trappers' Association. Reports are included in these transactions.

19. Motivator

Dr. Pat Bidol, Director, Environmental Conflict Project, School of Natural Resources, University of Michigan, was our motivator. Her definition of team-work was: "You have a shared goal and enough interdependence that you feel that you have to work together". She gave several examples of team-work (see her report in these transactions) using interest-based problem solving and bargaining (IBPSB).

20. Wednesday workshops

Six workshops were held on Wednesday, as follows:

Workshop 1 Needs for team-work	Chairperson: Rapporteur:	Laurel Whistance-Smith (Ontario) Ross Thompson (Manitoba)
Workshop 2 Needs for team-work	Chairperson: Rapporteur:	Yvon Dubé (Québec) Bob Bell (Northwest Territories)
Workshop 3 Failure analysis	Chairperson: Rapporteur:	Chuck Dauphiné (CWS) Joe Hickman (Canadian Wildlife Federation)
Workshop 4 Failure analysis	Chairperson: Rapporteur:	Lance Males (Ontario Federation of Anglers and Hunters) Wayne Pepper (Saskatchewan)
Workshop 5 Success analysis	Chairperson: Rapporteur:	Alcide Giroux (Ontario Trappers' Association) Mike Singleton (Federation of Ontario Naturalists)
Workshop 6 Success analysis	Chairperson: Rapporteur:	Key Brynaert (Canadian Wildlife Federation) Monte Hummel (World Wildlife Fund (Canada))

Reports can be found in these transactions.

21. Thursday workshops

Thursday's six workshops included the following:

Workshop 1 Formula for team-work	Chairperson: Rapporteur:	Laurel Whistance-Smith (Ontario) Jim Inder (CWS)
Workshop 2 Opportunities for the future	Chairperson: Rapporteur:	Ray Halladay (British Columbia) Rich Goulden (Manitoba)
Workshop 3 Formula for team-work	Chairperson: Rapporteur:	Chuck Dauphiné (CWS) Tony Keith (CWS)
Workshop 4 Opportunities for the future	Chairperson: Rapporteur:	Lance Males (Ontario Federation of Anglers and Hunters) John Bain (Ducks Unlimited Canada)
Workshop 5 Formula for team-work	Chairperson: Rapporteur:	Alcide Giroux (Ontario Trappers' Association) John Bailey (Northwest Territories)
Workshop 6 Opportunities for the future	Chairperson: Rapporteur:	Ken Brynaert (Canadian Wildlife Federation) Monte Hummel (World Wildlife Fund (Canada))

Reports of the workshops are included in these transactions.

22. Recommendations Committee report

This year's Chairman was Merrill Prime (Nova Scotia); 18 recommendations were approved by the conference.

23. Invitation

The Hon. Nellie Cournoyea, Minister of Renewable Resources and Information, NWT, invited the conference to hold its 51st Federal-Provincial Wildlife Conference in the Northwest Territories in 1987.

24. Attendance

There were 125 registered participants at this year's conference.

25. Dates of subsequent conferences

The following dates have been confirmed for future conferences:

1985, 25-28 June - Halifax, Nova Scotia
1986, 16-19 June - Ottawa, Ontario
1987, ? June - Yellowknife, Northwest Territories.

OFFICIAL WELCOME

The Hon. A.W. Pope
Minister
Ontario Ministry of Natural Resources

Doug Pollock and the Program Committee were very kind to consider Timmins as the site for their meeting, not that they had much choice. That is not true, but I was pushing for my home town of Timmins because over 90% of the land mass of the Province of Ontario is in what is considered to be northern Ontario. This part of the province, I think, is fairly typical of northern Ontario, though it is in the arctic watershed, and we felt that some of our colleagues would, therefore, be more at home than they were in other locations in the province and in Canada.

In this area we have a significant dependence on our natural resources, including wildlife. We have a forest products industry situated in northern Ontario that provides 80 000 direct jobs and another 80 000 indirect jobs. Most of them are in northern Ontario, but a significant proportion in southern Ontario and in Toronto. We have a mining industry, now with its emphasis on precious metals, that is active and has set all-time records in terms of claims staked and recorded here in Ontario last year. We have 25 000 to 28 000 miners employed directly in the industry, and another 40 000 jobs provided indirectly, and of course in northern Ontario we have a significant number of trappers as Alcide Giroux, who is here, would tell you, earning their livelihood off the land. Therefore, the entire economy and what makes northern Ontario drive, and in my submission what makes Ontario drive economically, is its resource base, and that resource base is situated here in northern Ontario.

We also have significant centres of population in the north--Sudbury, Sault Ste. Marie, Thunder Bay, North Bay, Kenora, Dryden, and here in Timmins--all of which have important transportation and communication links to serve people, not only in these communities but from outlying ones.

It is an historical area as well, one that has its roots back to 1686 when French and British interests first battled for control of James Bay and Hudson Bay, and had a number of confrontations not far from here. Since then, of course, its major developmental push came in 1910 and 1911, with the Timmins brothers and Sandy McIntyre making the first major mineral finds in this area. We, as northerners and as Ontarians, have recently been trying to meet the challenge of a good blend of resource use and preservation. We have tried to do it province-wide with our land-use planning exercise, with 184 open houses in many communities, big and small, throughout northern Ontario as well as in southern Ontario, and with regional forums that we established in 1982, and meetings with interest groups. We have also attempted through the development of forest management agreements to take into account the wildlife of the province, and many interest groups at this conference have helped us in designing forestry prescriptions that have allowed us to protect other wildlife values that we think are of equal importance to the Province of Ontario.

Having said that, I am very happy that the theme of this conference involves working together in managing a fascinating living resource. We have to share the load, as far as I am concerned, with other groups in the province and the private sector--volunteer groups. We have to use each other's experience. We have to get them involved. We have to learn as well from all of you from different parts

of Canada and the United States--what your experiences have been, and what your successes and failures have been. We need your advice to take advantage of the very positive aspects of team-work and working together with other ministries of the government, other governments of the country, and private and volunteer interest groups. We think we are making progress, but we think we can do a better job. That is what we in the Ontario delegation are here to find out from you, and I am honoured and delighted that you are here in Timmins for that purpose. I would like to thank you for making a special effort to come to Timmins.

I would like to introduce to you a man who is one of the true pioneers of our community, who grew up in Motagami Heights, which was very important and was named a subdivision of the Town of Timmins 60 years ago. His Worship Mayor Vic Powers and I go back to 1973-74, when I served on Timmins Municipal Council with him, and was no end of frustration for him in his carrying out of his duties. He has been mayor now for two terms in the City of Timmins, and he is the only man I know who can hold down two full-time jobs and work at them both full-time. He knows virtually everyone in this community by first name, and he also has a tremendous background of experience in municipal politics that really helps me in understanding what this community is all about, and the kinds of assistance it needs from the provincial government. With that, I would like to introduce you to His Worship Mayor Vic Powers, Mayor of Timmins.

V. Powers
Mayor of Timmins

As Alan Pope stated, he served on council with us in 1973-74. We like to claim that we taught him everything he knows. That is not quite true, because Alan has gone a lot further than we would have every been able to project him. We are very proud of the progress that he has made and the accomplishments he has achieved on behalf of the City of Timmins on a broader basis.

The City of Timmins was first formed in 1912 as the Town of Timmins, and that was shortly after the discovery of gold at the Hollinger Mine in 1910. It was named after the family that financed the Hollinger Mine--the Timmins family from Montreal. The Town of Timmins grew by leaps and bounds from 1912 on. In 1934, President Franklin Roosevelt pegged the price of gold at $35 an ounce--prior to that it had been $22 an ounce--and following that the Town of Timmins doubled in size in the span of about 7 years. In short, there was no depression in Timmins. It was one of the few places in Canada that prospered during the depression. The war period, of course, was one of stagnation, and in the post-war period, with the price of gold still pegged at $35 and inflation taking its toll, Timmins did not enjoy the post-war expansion that the rest of the country was experiencing.

However, exactly 20 years ago this spring, in 1964, the Texas Gulf Sulphur Company announced a huge discovery here in Timmins, and since that time we have never looked back. If you drive around the city, you will see new subdivisions in every corner. This is, as I say, the largest city in Canada--it is 84 km long, and covers 3170 km^2. There are two main reasons for that, of course: one is to obtain the revenue from the mining industry, and the other is to make certain that there is proper planning so that there will not be a glue factory next to a church. We certainly have, as I say, made great strides forward in the last few years.

We are glad that you have chosen Timmins as a site for your conference, rather than some of those smaller centres such as Toronto and Montreal. In any event, I do hope that you enjoy your few days here, and I know that the theme of the conference is very important to all of us, because all of us are very anxious that we preserve the wildlife as it is in its *natural state. I know that you* are the people who are going to see that this is brought about and preserved. So do have a good time during the next few days. I am certain that your deliberations will be successful.

Update report

REPORT ON ACTION TAKEN ON RECOMMENDATIONS OF THE
47TH FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

D.K. Pollock

Recommendation No. 1 (Appreciation for hospitality)

That the conference express its appreciation to the Alberta Fish and Wildlife Division of the Department of Energy and Natural Resources and to the Hon. Don Sparrow for their hospitality in hosting a barbecue for all delegates and their families on the evening of 29 June at the Red Barn; and that a letter of appreciation be sent to the Alberta Wildlife Park for a tour of their facilities for all attendees at the barbecue.

Action

Letters of appreciation sent to the Hon. Don Sparrow, Bob Andrews, and the Alberta Wildlife Park. Action completed.

Recommendation No. 2 (Appreciation for hospitality)

That the conference express its appreciation to the Canadian Wildlife Service of Environment Canada for their hospitality in hosting a reception on the evening of 27 June to welcome all delegates and their families to the 47th Federal-Provincial Wildlife Conference (FPWC).

Action

Thank-you memorandum sent to B. Tétreault. Action completed.

Recommendation No. 3 (Appreciation for hospitality)

That the conference express its appreciation to the Alberta Fish and Game Association and the Canadian Wildlife Federation for their hospitality in hosting a barbecue for delegates and families on the evening of 28 June at Sherwood Park.

Action

Thank-you letters sent to the Canadian Wildlife Federation and the Alberta Fish and Game Association. Action completed.

Recommendation No. 4 (Appreciation for hospitality)

That the conference express its appreciation to Ducks Unlimited Canada for their hospitality in hosting a breakfast for all delegates on the morning of 29 June at the Hotel Macdonald.

Action

Thank-you letter sent to Stew Morrison, Ducks Unlimited Canada. Action completed.

Recommendation No. 5 (Appreciation to non-governmental organizations)

Whereas many non-governmental organizations (NGOs) were represented at the 47th Federal-Provincial Wildlife Conference by their appointed delegates, it is recommended that these organizations be thanked for their valuable participation.

Action

Letters of appreciation sent to all NGO attendees who participated in the conference. Action completed.

Recommendation No. 6 (Regret for absence of British Columbia)

That the conference acknowledge with regret the absence of representation from the Province of British Columbia.

Action

Letters sent to the Minister of Environment, BC, and Don Robinson expressing regret that BC was not represented at the conference. Action completed.

Recommendation No. 7 (Fur Institute of Canada)

Whereas the Task Force established under Recommendation No. 11 of the 1981 Federal-Provincial Wildlife Conference has revised the proposal for a Fur Institute of Canada in accordance with direction received from the September 1982 Wildlife Ministers' meeting, and

whereas the revised proposal has gained the approval of the non-governmental sectors of the Canadian fur industry, and

whereas private-sector funding has been pledged for humane trap development programs under the aegis of the Fur Institute of Canada, and

whereas it is essential to the welfare of the Canadian fur industry that the Fur Institute of Canada become operational before the autumn of 1983,

therefore it is recommended that the Fur Institute Task Force:

(1) modify the "Articles of incorporation" as needed to meet legal requirements and adjustments recommended by the various wildlife jurisdictions across Canada, provided these are within the spirit and intent of the May 1983 "Fur Institute of Canada" proposal;

(2) secure the remaining funding commitments required for the administration of the institute and the operation of its programs; and

(5) establish the Fur Institute of Canada, using the current Task Force members as principals, with the aim of having the Institute operational before 30 September 1983;

Action

The Fur Institute of Canada was incorporated on 30 September 1983. The Executive Director, Ron Daniel, was appointed on 1 December 1983. Research and development programs and a public relations program have been developed and will be explained in greater detail during Mr. Daniel's presentation on 19 June. Action on-going.

Recommendation No. 8 (Co-operation in habitat enhancement)

Whereas past Federal-Provincial Wildlife Conferences have encouraged more active fiscal participation by the private sector in habitat preservation and enhancement, and

whereas recognition of the magnitude of effort by industry and private conservation organizations in habitat protection and development is now becoming apparent, and

whereas this conference has clearly identified the potential benefits of greater integration between governmental agencies, industry, and the private organizations, and

whereas there has not been the expected growth in habitat programs because the increased efforts by industry and private conservation organizations appear to have been offset by an overall contraction in government spending,

therefore it is recommended that federal and provincial wildlife agencies accelerate their efforts in developing co-operative arrangements, with industry and/or private conservation organizations as partners, to help stem further declines in governments' fiscal participation.

Action

A Wildlife Habitat Canada Co-ordinator was appointed in 1983. He met with each province and many non-governmental organizations during the winter. The Minister of Environment announced the creation of a new Foundation, Wildlife Habitat Canada, on 20 February 1984. Dave Neave is on the agenda to speak on Wildlife Habitat Canada. Action on-going.

Recommendation No. 9 (Value of wildlife in the North)

Whereas a feasibility study report prepared by Dr. P.J. Usher has been submitted to the Wildlife Directors' Committee in accordance with Recommendation No. 16 (1982 FPWC), and

whereas this report proposes an approach to measure commercial and subsistence wildlife values among native peoples and recreational wildlife values among non-native people of the Yukon and Northwest Territories,

therefore it is recommended that the examination be extended to address the feasibility of measuring these values among native and non-native peoples residing in northern British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Newfoundland, and the Yukon Territory. A committee consisting of a representative from each of these provinces, the Yukon Territory, and the World Wildlife Fund Canada will be created under the chairmanship of the Canadian Wildlife Service. The committee will meet with Dr. Usher on 3 August 1983 to assess the nature of relevant data on the matter, and report to the Wildlife Directors' Committee in September 1983 to decide further action. The benefiting provinces, the Yukon, and World Wildlife Fund Canada will contribute up to $1000 each to defray costs for Dr. Usher's services and for an analysis of the coverage of the Statistics Canada sample in remote areas of the provinces.

Note: Northwest Territories abstained.

Action

The feasibility of measuring commercial and subsistence wildlife values among native and non-native peoples residing in the northern segments of the provinces was examined under the terms of contracts funded jointly by the wildlife agencies concerned. Jean Cinq-Mars will report on this subject on 19 June. Action on-going.

Recommendation No. 10 ("Comprehensive analysis of the 1981 national survey on the importance of wildlife to Canadians")

Whereas Canada's first comprehensive survey on the importance of wildlife to Canadians has been completed, and

whereas the highlights of this survey have been published, and

whereas the nature and extent of the information is of vital importance to governmental and non-governmental wildlife management agencies in Canada, and

whereas a "Proposal for a more comprehensive analysis of the results of the survey on the importance of wildlife to Canadians" has been tabled at this conference,

therefore it is recommended that the proposal be sent to governmental and non-governmental wildlife agencies normally represented at this conference, and that those agencies transmit their written comments on this proposal and the cost-sharing formula to the authors of this proposal by 15 August 1983. The authors will meet in late August 1983, along with representatives of other interested sponsors of the survey, to discuss the comments and revise the proposal as required. A revised proposal will be presented to the Wildlife Directors' Committee in September 1983 to decide further action.

Action

The feasibility of conducting a joint comprehensive analysis of the national survey on the recreational importance of wildlife to Canadians was examined. Jean Cinq-Mars will report on this subject on 19 June. Action on-going.

Recommendation No. 11 (Habitat guidelines)

Whereas the 46th Federal-Provincial Wildlife Conference, after due consideration of the efforts devoted to this task since its inception at the 43rd Federal-Provincial Wildlife Conference in Regina in 1979, recommended that:

> the Task Force that has been established meet to debate, review, and refine the present document tabled at the 46th Federal-Provincial Wildlife Conference, and to continue development of approaches for habitat protection that could be implemented by the various levels of government, or by the private sector, independently or jointly with government, and
>
> that the Task Force report back to the delegates before the next year's conference, and

whereas the Task Force chairman has tabled a report for the 1983 conference delegates, and

whereas that report chronicles the actions undertaken in response to the above recommendation from last year's conference, and

whereas the Task Force chairman believes that momentum for this exercise has now been lost and that little additional benefit can be derived from a protraction of the initiative, and

whereas the "Guidelines for wildlife policy in Canada" contain or include direct reference to habitat protection and enhancement,

therefore it is recommended that the report tabled last year at the 46th Federal-Provincial Wildlife Conference, together with a summary of the review of the report, be accepted as the final products of the Steering Committee, and

that the committee struck to develop a "National habitat strategy" be dissolved, and

that a copy of the documents, correspondence, questionnaire results, etc., generated during the course of the exercise be filed with the Conference Secretary.

Action

Committee informed that its request to be dissolved was unanimously approved. Documents, correspondence, and questionnaire results are filed with Habitat Canada. Action completed.

Recommendation No. 12 (Committee on the Status of Endangered Wildlife in Canada, COSEWIC)

Whereas:

(1) COSEWIC has completed more than 5 years of productive activity since the original call for such a body by the Federal-Provincial Wildlife Conference in 1976,

(2) COSEWIC has found it desirable to add plants to its list of concerns,

(3) scientists associated with COSEWIC stress the need for a conceptually sound and consistent basis for determining the status of wildlife and of wildlife habitats,

(4) in national and international fora, COSEWIC represents a collectively defined Canadian commitment and performance criterion, but has been forced to rely heavily on non-governmental funding, and

(5) the 1983 general meeting of COSEWIC expressed a strong desire to increase the overall efforts and activities of the committee,

therefore it is recommended that the conference:

(1) reaffirm the original mandate of COSEWIC to declare the national status of Canadian species thought to be at risk,

(2) direct COSEWIC to continue work on plants,

(3) encourage COSEWIC to pursue a broad spectrum of financial support, and

(4) urge governments, where and when appropriate, to publicize measures taken to benefit species under their purview that have been assigned status by COSEWIC.

Note: Ontario was opposed.

Action

Jurisdictions confirmed the original mandate of COSEWIC and directed COSEWIC to continue work on plants. COSEWIC was encouraged to pursue a broad spectrum of financial support. Funding has been sought through a conservation-orientated private agency. The funds have not been pledged yet. Governments were asked to publicize action taken re COSEWIC species. COSEWIC's annual report details highlights for the past year. Action on-going.

Recommendation No. 13 (Theme for National Wildlife Week)

It is recommended that the theme for National Wildlife Week in 1984 be "Wildlife and wetlands", and be considered as Part 2 of the comprehensive theme begun last year under the title "Learning about wildlife", by reviewing the role of wetlands and their importance to a wide array of wildlife species and of humans.

Action

Delegates unanimously supported this recommendation and so informed the Canadian Wildlife Federation. Action completed.

Recommendation No. 14 ("Canadian wildlife administration")

Whereas there is a need in Canada for a publication dealing with the administration of wildlife programs,

therefore it is recommended that the Federal-Provincial Wildlife Conference reaffirm its support for the continued annual publication of its report, "Canadian wildlife administration", in order to exchange information on innovative administrative techniques, and to exchange new ideas and policies in the administration of wildlife.

Action

Conference unanimously reaffirmed its support for "Canadian wildlife administration". Manitoba published the 1984 edition. Action on-going.

Recommendation No. 15 (Canadian Wildlife Management Institute)

Whereas the Task Force established under Recommendation No. 12 of the 1982 Federal-Provincial Wildlife Conference has completed its mandate, and

whereas the official delegates have agreed that the Task Force recommendations be brought before the 1983 Federal-Provincial Wildlife Conference, and

whereas there is a general consensus among the delegates that wildlife management in Canada is at the cross-roads of a new era, in which leadership and participation of non-governmental organizations in the identification and resolution of national wildlife issues is fundamental,

therefore it is recommended that the Task Force established under Recommendation No. 12 of the 1982 conference:

(1) proceed to encourage the formation of a "Canadian wildlife management institute" which would -

    (a) promote the conservation of Canadian wildlife and excellence in the practice of wildlife management, and

    (b) as part of its role, sponsor an annual "Canadian wildlife conference", and

(2) that whatever interested parties are prepared to sponsor such an institute present a proposal setting out their aims, objectives, and sources of funding, etc. to the 1984 conference.

Action

A contract was let with Dr. Louis Lemieux of Diomedea Consultants. We has submitted a report with various options and this will be discussed in detail during Mr. Andrews' presentation on 19 June. Action on-going.

Recommendation No. 16 (National Wildlife Week)

Whereas the Federal-Provincial Wildlife Conference endorses the Canadian Wildlife Federation's National Wildlife Week program, and the Task Force to examine what is being done has discovered a multitude of ideas and methods to improve the impact of that program,

therefore it is recommended that a committee made up of representatives from Manitoba, Ontario, and Newfoundland, as well as the Canadian Wildlife Federation and two other non-governmental organizations (NGOs) at a provincial or national level, complete guidelines for co-ordinated and co-operative ways in which governments and NGOs can deliver that National Wildlife Week program, and

that such guidelines be established and recommended for operation on a test basis as early as 1984.

Action

There is an update and discussion period on 19 June. Members of the Task Force will be available to answer questions. Action on-going.

Recommendation No. 17 (Appreciation of NGOs)

That the conference acknowledge that many NGOs wish to express their sincere thanks and appreciation to the Federal-Provincial Wildlife Conference for being allowed to participate in the conference. A particular thanks should be presented to the government departments that assist the NGOs, thereby enabling them to participate.

Action

Jurisdictions were made aware of NGOs' feelings on being allowed to participate in the conference. Action completed.

Recommendation No. 18 (Appreciation to A.G. Loughrey)

Whereas Alan G. Loughrey has for over 30 years contributed actively to wildlife research and management in Canada and to the work of the Federal-Provincial Wildlife Conference,

therefore the 47th Federal-Provincial Wildlife Conference directs the Secretary to express to Mr. Loughrey its appreciation for his service and best wishes for his forthcoming retirement.

Action

Letter of appreciation sent to A.G. Loughrey. Action completed.

Update report

"CANADIAN WILDLIFE ADMINISTRATION"

R.C. Goulden
Manitoba Wildlife Branch

In 1984, it has been Manitoba's turn to publish "Canadian wildlife administration". You may recall that Manitoba undertook publication of the very first issue back in 1975, then under the editorial hand of Al Murray.

So that we are comfortable with what "Canadian wildlife administration" is all about, I am going to read a couple of excerpts from the flyleaf of that first publication, which states that: "Wildlife resources in Canada are under a continuing and increasing pressure from urbanization, agricultural intensification, and a growing population". Sounds kind of familiar doesn't it? "Resource departments are being called upon for more and better management, which is usually costly and time-consuming. It is to reduce costs and avoid unnecessary delays that this publication was prepared". Further, he says: "While there are several outlets for scientific research reports, there is no vehicle in existence today for the disseminating of wildlife administration information. This is a gap that needs filling and is the idea behind this publication". Still further: "It permits us to go quickly to the right person in other provinces for help when we face a situation similar to the one reported on. Face-to-face communication among wildlife administrators is a difficult task given the size of the country, infrequency of suitable meetings, and the magnitude of the programs and projects underway". That is some of the background behind publication of this journal.

This year, as in several previous years, the Federal-Provincial Wildlife Conference Program Committee requested a 10-minute presentation or "discussion" on "Canadian wildlife administration". This was conveyed to me as the publisher of this year's journal in about mid February. As one wildlife administrator who has been around since 1975, and who has participated in the discussions surrounding the inception or genesis of that first journal and the subsequent reviews made of it back in 1978, 1979, and again in 1980, and on the basis of discussions at this conference last year, there was no specific direction given to me as this year's publisher to suggest that I should carry out yet another survey, as it were, of the usefulness of this particular journal. Therefore, I opted not to undertake the traditional survey among the publishing jurisdictions.

Instead, I believed that an examination of the previous reviews, followed by discussion here, and then either reaffirmation or rejection of the journal idea, would likely be every bit as productive. This belief was reinforced by my knowledge of the fact that CWS staff were undertaking a rather comprehensive assessment of the history and evolution of the publication. I would now like to read a few excerpts from the report prepared by CWS. This was the only report submitted to me, although the Chairman did ask agencies to submit concerns or suggestions about the journal if they felt so inclined.

Assessment

The CWS assessment says the following:

"'Canadian wildlife administration' has been published in conjunction with the Federal-Provincial Wildlife Conference since 1975. Every jurisdiction has had responsibility for publishing this review, some of them more than once (at least one province more than once). Over its lifetime, 'CWA' (as I will now call it) has covered a wide range of themes and topics which have only generally reflected the original objective, 'to foster communication among wildlife agencies in the area of program administration'.

"From the Canadian Wildlife Service viewpoint, a significant mismatch of objective and vehicle has developed over the life of this publication. With the sobering effect of budget restraint, can we now justify the expense involved in publishing a limited run of a 100-page review?

"It is time for the Federal-Provincial Wildlife Conference to decide whether or not this publication is still viable.

"The key questions to be answered are:

(1) Are the publication's objectives still valid? If not, can new objectives be set?

(2) What is the real value of the publication?

(3) What is the audience? Are there others that could be reached?

(4) Are the existing guidelines for production adequate?

(5) Are there worthwhile alternatives to the present annual change of responsible agency?".

They go on and say: "A discussion of the merits of the publication is overdue". In point of fact, however, we have had several discussions on the merits of the publication.

"Several reviews", they continue, "of this publication have already been undertaken". For example: "In 1978 the FPWC received the results of a limited audience survey of 'CWA'. A questionnaire was circulated to federal, provincial, and territorial wildlife agencies requesting comments".

Next: "The consensus of the responses to the questionnaire indicated that the publication should continue. In the past 7 years, a number of things have changed that could result perhaps in a materially different response to a new survey.

"At the 1979 FPWC the question of equitable funding of 'CWA' was discussed. It was decided that two jurisdictions could jointly publish an edition of the publication, thus reducing individual financial burdens." In fact, we have had that happen at least once, and in one case four jurisdictions. "In 1980, Doug Roseborough pointed out in his Federal-Provincial Wildlife Conference review of the publication that his agency found the terms of reference and the editorial policy left something to be desired", and, as a result of that, undertook a fairly comprehensive investigation of that policy and came up with some rather useful and productive directives.

Skipping over a bit, the CWS report concludes: 'There was no substantial discussion on 'CWA' at the 1981-83 conferences. However, the above notes from several former FPWCs reveal one underlying concern. It is that there are fundamental questions about the value of publishing 'Canadian wildlife administration'. And there are two aspects to this concern. First, is it worthwhile publishing an annual compendium of articles ostensibly on 'administration' for a relatively small audience? And second, are there alternative production methods that will reduce growing costs in staff time and funds?".

If the FPWC decides that this publication is still valid, the following terms of reference, content guidelines, and specifications are being proposed by CWS:

"(1) The terms of reference of the publication should include: 'Canadian wildlife administration' is an annual review of Canadian wildlife law, regulations, policies, and management programs, including organizational arrangements and other administration subjects. The publication is not a vehicle for articles on wildlife biology.

(2) The content of the publication should include: key articles of the year's identified subject; a list of key staff managers, their addresses and telephone numbers, from each jurisdiction, and non-governmental organizations; and organization and function charts for each jurisdiction and governmental organization.

(3) Printing specifications could be defined" (and they include a number here).

"The establishment of an editorial board will not be necessary" (according to this report). "It will be the responsibility of the publisher to adhere to the terms of reference". To conclude, the CWS view is that "the questions posed over the years at the FPWC must be addressed if 'Canadian wildlife administration' is to continue."

Background and recommendation

I will now point out that, before opening discussion on this particular topic, I could confirm for you a number of things. First of all, this year Manitoba spent an estimated $9700 to produce 2000 copies in English and 200 copies in French of that particular journal. We encountered the standard technical problems inherent in a publication of this kind, and for the most part I believe we were able to accommodate them.

Manitoba's experience, having been the only jurisdiction to have produced this item twice since 1975, is that a journal of this kind, carrying articles on wildlife administration that encompass wildlife law, regulations, policy, organizational arrangements, personnel directories, and the like, is just as much if not more needed today than it was back in 1975. In other words, the original reasons for going into the journal still exist, and perhaps even have been reinforced.

Past reviews, including that which was carried out by CWS this year, have provided and continue to provide valuable direction to publishers. The direction

is there if you really want to seek it. There seems to exist a consensus among jurisdictions that ample alternative outlets already exist for publication of biological reports and findings, and use of those outlets should be encouraged, thereby reserving "Canadian wildlife administration" as a somewhat unique journal principally, or let me say exclusively, for the publication of administrative types of articles.

Reconsideration of this journal's appropriateness should be undertaken if the Federal-Provincial Wildlife Conference, as we now know it, is dissolved in favour of a "Canadian wildlife conference" such as has been suggested under the sponsorship of a Canadian Wildlife Management Institute. It is not inconceivable that such an Institute might wish to take over publication of such a journal, or one acceptably consistent with it, so as to render the present arrangement obsolete. So we ought not discard that possibility.

However, to propel us forward, it seems to me that until such a time--and in light of last year's unanimous support for the journal, and because of Manitoba's belief in the value of the journal--speaking on behalf of that province, I strongly recommend its continuance. If you think that venture is worthy, we in Manitoba would be prepared to work with any other jurisdiction in the task of formulating, or perhaps the better word is crystalizing, a set of editorial policies and publishing specifications based on our past reviews and assessments to date. This could be circulated during 1984-85 and, subject to your confirmation, adopted at the 1985 Federal-Provincial Wildlife Conference, and then that would be more or less chipped in stone.

Now, those editorial policies and publishing specifications are generally known but they are not well articulated. I believe that CWS might be prepared to assist us in this, and I am sure that I could get the support of a couple of other agencies who are quite knowledgeable in this field. Consequently, it would be my recommendation that the publication continue, but that we crystalize its editorial policy, and at such time in the future as it is found to be either redundant or superfluous, then we reconsider its appropriateness.

Moving directly to the announcement of the publisher for 1985, I have the list of all agencies who have published it from 1975 through 1984. This is Manitoba's opportunity to publish it for the second time, and following logically, if we went in the order that we followed before, would be Alberta in 1985, British Columbia in 1986, and Saskatchewan in 1987. Without wanting to put any particular heat on my colleague from Alberta, it seems rather logical that Alberta might want to volunteer to produce this journal next year.

Update report
National Wildlife Week program (1)

GUIDELINES FOR A CO-ORDINATED AND CO-OPERATIVE NATIONAL WILDLIFE WEEK PROGRAM

Presented by the Committee Reviewing the Program*

Introduction

Recommendation No. 16 of the 47th Federal-Provincial Wildlife Conference called for a committee, made up of representatives of provincial wildlife agencies and non-governmental wildlife organizations (NGWOs), to complete guidelines for co-ordinated and co-operative ways in which governments and NGWOs could deliver the National Wildlife Week (NWW) program, and that such guidelines be established and recommended for operation on a test basis as early as 1984. (The guidelines were not prepared until May 1984, and so they were not available for testing during NWW 1984).

This report of the committee is presented to the 48th Federal-Provincial Wildlife Conference and is particularly appropriate for its 1984 theme, "Team-work in wildlife management". The guidelines illustrate team-work throughout in presenting ideas and methods for co-ordination and co-operation within the NWW program across Canada.

The report offers direction for all agencies and organizations that are involved, or should be involved, in NWW and is based on a multitude of comments by interested parties across Canada and particularly, of course, by the five committee members.

The committee believes that if all or most of these guidelines are implemented by all those agencies concerned, the NWW program will be greatly enhanced and increasingly successful from year to year in meeting its goal.

Goal statement

The goal is an increasing awareness and appreciation by Canadians about wildlife, especially through the education of youth on the subject, using National Wildlife Week as a focus.

There is much evidence that we do not need to convince children that they should like wildlife. They already appear to have a good grasp of the aesthetic value and importance of wildlife. However, there is considerable room for improving their awareness of the needs of wildlife and the serious nature of the problems jeopardizing the continued existence of wildlife today.

Commitment to the NWW program by politicians, the public, governmental wildlife agencies and non-governmental wildlife organizations is required to help achieve this goal. As communications about National Wildlife Week increase, and the quality of the materials produced for it improves, this essential commitment will grow.

Guidelines for co-ordination and co-operation

NWW teachers' kit

(1) Rotating advisory committee - An advisory committee, led by the Canadian Wildlife Federation (CWF) and further made up of two governmental wildlife agencies and two NGWOs, should be named each year at the Federal-Provincial Wildlife Conference to act as advisers to CWF for the preparation of the teachers' kit and other materials. It will be the committee's responsibility to review all materials with whomever they deem necessary to ensure accuracy of content, appropriateness of educational level, and quality and relevance of materials to all of Canada as much as possible.

(2) Target audience - The target educational level should not be beyond senior elementary, and ideally is grades 4, 5, and 6, which usually include 9- to 12-year-olds.

(3) Theme of NWW kit - The theme should be decided 21 months in advance at the Federal-Provincial Wildlife Conference. Simple and specific themes should be chosen, so that teachers can readily focus on the subject and students can better grasp it.

(4) CWF to hire professional educational materials writer - The kit's text should be written each year by an expert (who may be a teacher) to ensure that the writing level is appropriate for elementary teachers to easily translate for their students subjects that they themselves may not be familiar with.

(5) Kit materials - 40% of the kits should be activity-orientated materials for the children themselves, such as games and puzzles, that the teachers may copy or provide to the students in some way. Place more effort in producing these activities rather than producing the glossy booklet for teachers. (Costs may be reduced.) CWF should investigate the feasibility of using appropriate Project WILD activities in the kit.

(6) Kit poster - The kit poster should be simple, but have great impact and be nationally representative. It should be made available in quantity, separate from the kits, to increase visibility and permit low-cost promotion.

(7) Other uses of kit - Provinces should provide an information sheet to teachers about where the kit theme and materials can be used in curriculum areas throughout the year. Curriculum experts in each province could be asked to prepare this as a stuffer for each province's kits. (This was done successfully in Newfoundland and Labrador in 1984.) The aim here is that the kit may be used throughout the year, and may be used year after year because the theme relates to various parts of the annual curriculum.

(8) Education ministry support - Wildlife agencies should obtain as much support for the NWW kits as possible from the appropriate areas of their education ministries. Letters of direction to school principals about the NWW kits, review of materials by curriculum experts, and dissemination of the kits to schools are helpful methods of support that can be sought.

(9) Reference list - The kit should contain some information on what other materials are available to teachers on each year's theme, and where to obtain such information.

(10) English and French kits - CWF should continue to provide equivalent materials in English and French.

Other materials

(11) Film - Since the theme for NWW will be set 21 months in advance, there will be ample opportunity to produce a short (10-minute) film on the subject during that time. This should be done by CWF contracting the job and using joint funding provided by themselves and the federal, provincial, and territorial governments, and by private-sector donations. Reference to NWW would not be desirable because it would date the films. The series of films will develop into a library of children's-level films on wildlife subjects that are quality-controlled by the wildlife agencies, and that will enjoy broad and long-standing use.

Contests/awards

(12) Monitoring attitudes - The national contest/awards portion of the NWW program is a good way of monitoring the attitudes of children towards wildlife, and in turn the success of the NWW educational program and other wildlife educational programs within the provinces and territories. A review of progress in educating children about wildlife, using this contest/award information and other information, such as Project WILD, should take the form of a report to the Federal-Provincial Wildlife Conference every 5 years, beginning in 1985. The governmental and non-governmental agencies would submit their reviews to CWF by April 1985 for consolidation into the report to the FPWC in June.

(13) Broaden scope of contest/awards - The scope of the contest/awards should be broadened to include prose or poetry or a wildlife project.

(14) Winners declared - Judging of the contest/awards should be carried out and winners notified with as much fanfare as possible within the current school year.

Kit distribution

(15) Numbers determined - Agencies requiring kits for distribution will notify CWF of the numbers in English and French needed by 30 June annually.

(16) Availability of kits - Kits will be available for distribution to teachers by 31 January each year.

(17) Broaden distribution - Provincial NGWOs should consider taking a hand in broadening the distribution of NWW kits to include Boy Scouts, Girl Guides, 4-H Clubs, etc., where the age range is 9- to 12-year-olds.

(18) Review distribution system - All wildlife agencies should review their distribution system regularly to ensure that it is the most efficient and effective means of getting NWW materials to the target-group teachers and other groups.

Promotion

(19) Communications plan - Each province or territory should write a communications plan for NWW annually that includes an outline of the co-ordinated efforts of all the wildlife agencies in the province or territory. This will serve to begin discussions and co-operation of wildlife groups within the province or territory.

(20) National promotion strategy - CWF should consider developing a national promotion strategy each year, including television and radio public-service announcements, to maximize effective communication about NWW. This need not be costly, as many networks could be persuaded to provide some free time.

(21) Teachers' publications - An excellent communications method is the placement of articles and announcements regarding NWW in teachers' journals or newsletters, especially those of specific associations or councils such as elementary teachers, science teachers, outdoor education teachers, and environmental science teachers. Most teachers belong to some teachers' organization, and there is usually no charge for this kind of advertising in their publications. This ensures early awareness of teachers about the NWW program.

(22) Teachers workshops and professional development days - Wherever possible, workshops for teachers or discussions with teachers at their PD days on the NWW program theme should be given by both governmental and non-governmental wildlife agencies. Teachers will get more ideas out of this than they will by just reading the kit materials.

(23) Nature and science centres - Provinces and territories should ensure that all nature and science centres within the province or territory receive as much information on NWW as possible, so that they can promote it further in their programs to young people and adults.

(24) News releases - Maintain media coverage through low-cost news releases.

(25) Exhibits - With 21 months' lead-time, exhibits and other communications materials can be assembled by both governmental and non-governmental wildlife agencies for use during NWW, and do not need to be designed so that they are dated and not useful afterward. Shopping malls are excellent locations for placing exhibits, but every opportunity at popular events should be taken.

Special events

(26) Ambassador - Some success in using a "celebrity ambassador" to promote NWW has been achieved. Provinces and territories might like to try this, and CWF might wish to have a "national ambassador" appear on radio and television to help promote the week and make it more nationally cohesive in character.

(27) Awards - Having NWW award winners receive their prizes in front of the legislative assembly or at annual conventions of wildlife agencies or similar special events is an ideal way to promote pride of achievement for young people and a higher profile for NWW.

(28) Proclamations - Signing ceremonies with mayors of municipalities or other dignitaries can help promote NWW and gain local support and media coverage.

Involvement

(29) Joint involvement - All governmental and non-governmental wildlife agencies should make an effort to be involved in NWW. Communication among agencies is a key to co-operative and co-ordinated activities that will promote sharing the work-load locally. Organizations should be able to set aside their philosophical differences and work together for something they all believe in.

(30) Local working groups - The provinces and territories should form their own standing committee, including members from governmental and non-governmental wildlife agencies, to liaise with the national rotating advisory committee and to co-ordinate the organization, delivery, and review of local programs.

(31) Speaking engagements at schools - Both governmental and non-governmental wildlife organizations should continue or increase the contact of their staff with school-children during NWW. There is no other method that has as much impact as this, and it ensures the proper interpretation of the kit materials.

(32) Special urban efforts - Special efforts should be made to focus on and deal with children from urban environments, who are noticeably more unaware of the values and needs of wildlife.

Feedback

(33) National evaluation form - CWF should develop a simple, one-page evaluation form about the kit materials to be inserted in the kit to gain feedback from teachers.

(34) Annual review of activities - Each province or territory should review its involvement and activities during NWW and report to CWF by 30 May. CWF can then report highlights from across Canada at the Federal-Provincial Wildlife Conference each June. This should be a job for the local working group of the province or territory.

The big picture

(35) Wildlife education across Canada - NWW must be a part of a larger context of educational programs about wildlife that is inherent in all the provinces and territories. This big picture should also include Project WILD.

* Committee members

The members of the reviewing committee are: Laurel Whistance-Smith (chairman); David Love, World Wildlife Fund; Lloyd Mayeda, The Native Conservancy of Canada; Dennis Minty, Newfoundland and Labrador; and Ted Muir, Manitoba.

National Wildlife Week program (2)

SUMMARY OF DISCUSSION
Guidelines for a co-ordinated and co-operative
National Wildlife Week Program (Recommendation No. 16 - 47th FPWC)

K.A. Brynaert (Canadian Wildlife Federation - CWF) said that he had a problem with this report in that he was not sure that it had followed the mandate that was given to it at the last Federal-Provincial Wildlife Conference. He had a very clear memory of the discussion, when the recommendation was put forward, that this committee was to look at initiatives that would expand the National Wildlife Week (NWW) program beyond what CWF was doing. He had been specific in making his views known that the one thing that would not actually be a productive exercise would be to critique what they were doing. CWF had always encouraged any input from any jurisdiction in terms of the NWW program that they were currently involved in. He also pointed out to the committee that there were several of these recommendations he had a bit of a problem with, in that they involved expenditures. The adoption of the recommendations that carried with them a commitment to expenditure by CWF, he thought, was beyond the competence of this group to decide. He asked that anything that involved expenditures by CWF be stricken from this report.

R. Thompson (Manitoba) said that, in the light of Mr. Brynaert's comments, he would like to add a few points to Laurel Whistance-Smith's showing that initiatives had been taken, and that these were not just hollow recommendations. Manitoba had expanded beyond CWF involvement. From the organizational standpoint, for the first time, a working group was established in Manitoba and it was a complete success. It consisted of the Wildlife Branch, Ducks Unlimited Canada, the Manitoba Wildlife Federation, the Manitoba Naturalists' Society, Canadian Wildlife Service, Fort Whyte Nature and Environmental Education Centre, Museums, City of Winnipeg, and the Polo Park Shopping Centre. There had been film and speaker presentations, a wetland wildlife doodle-poster contest, a wetland wildlife teachers' activity book, a poster contest, and a youth project competition.

So, perhaps with the type of report that had been tabled, along with the specific examples of things that had been done to follow up on those recommendations, they had in tandem met the mandate.

G. Kerr (Western and Northern Region, CWS) added that they were very pleased to be able to co-ordinate with Manitoba last year, and again this year. They had had a very similar event in Saskatoon in 1984, where seven agencies joined together and had an open house. The cost was not that great, and he thought that the key to Wildlife Week was getting together and doing it collectively. He appreciated the committee's recommendations, and would like to think that they were directed at all of them and not just at CWF. If they decided, and it was a big if, that the theme for next year was "Communicating on wildlife", perhaps the report might best be directed towards that planning committee to decide what they could build into this subject matter in next year's conference.

M. Hummel (World Wildlife Fund Canada) pointed out that David Love was not present, but had participated in the committee on behalf of World Wildlife Fund.

Mr. Hummel was concerned about Mr. Brynaert's feeling that the committee, as a whole, did not respond to last year's recommendation. The recommendation said that a committee should complete guidelines for co-ordinated and co-operative ways in which governments and NGOs could deliver CWF's National Wildlife Week program. He felt, apart from the efforts of David Love on the committee, that Laurel Whistance-Smith deserved congratulations as chairman. It was a very extensive report, but that was not to say that each and every recommendation would be acceptable or unacceptable to CWF. World Wildlife Fund was very interested in co-operating in this, and in serving on the first advisory committee if that idea went ahead. About additional expenditures, ideas for films and public service ads and things would cost money, and World Wildlife Fund would certainly be interested in assisting with some of those expenses, but not the funding in its totality. Also, they were interested in the film that might be converted into video tapes for use in schools.

He asked what would happen now that the 35 recommendations were tabled by the committee. These were meant for all of them, but obviously CWF had to be given some time to consider them and respond.

K.A. Brynaert welcomed the participation of any jurisdiction or organization, but did not accept editorial boards, and took exception to a recommendation that they hire professional educational material writers. They did in fact, have professional educational writers already. If they were not doing an adequate job, he suggested that this body might want to assign that responsibility to another organization. They would not do the job on a basis of a committee.

J.D. Roseborough (Ontario) said that the original recommendation had recommended that a committee made up of representatives from Manitoba, Ontario, and Newfoundland, as well as CWF and two other NGOs at a provincial or national level, complete guidelines for co-ordinated and co-operative ways in which governments and non-governmental agencies could deliver the NWW program, and that such guidelines be established and recommended for operation on a test basis as early as 1984.

The action was the update that Laurel Whistance-Smith had written, which was a report of the Task Force. He suggested that they refer the report of the Task Force to the committee, who could go through the recommendations and see which ones were true recommendations and which were options for governments, non-governmental organizations, or anyone to participate in National Wildlife Week. What came through to him in the report was the enthusiasm being created by National Wildlife Week, not only within but outside governments. He thought that it was just a matter of semantics rather than indirection in this report that made it not all that totally acceptable to CWF. He would like to see established a working group made up of Laurel Whistance-Smith, Monte Hummel, Dave Pike, Ross Thompson, someone from CWS (to be designated by Bert Tétreault), and Ken Brynaert from the Canadian Wildlife Federation. That group would go over the report and make recommendations for the Recommendations Committee to consider.

National Wildlife Week program (3)

AMENDED GUIDELINES FOR A CO-ORDINATED AND CO-OPERATIVE NATIONAL WILDLIFE WEEK PROGRAM

Introduction

Recommendation No. 16 of the 47th Federal-Provincial Wildlife Conference called for a committee, made up of representatives of provincial wildlife agencies and non-governmental wildlife organizations (NGWOs), to complete guidelines for co-ordinated and co-operative ways in which governments and NGWOs could deliver the National Wildlife Week (NWW) program, and that such guidelines be established and recommended for operation on a test basis as early as 1984. (The guidelines were not prepared until May 1984, and so they were not available for testing during NWW 1984).

This report of the committee is presented to the 48th Federal-Provincial Wildlife Conference and is particularly appropriate for its 1984 theme, "Team-work in wildlife management". The guidelines illustrate team-work throughout in presenting ideas and methods for co-ordination and co-operation within the NWW program cross Canada.

The report offers direction for all agencies and organizations that are involved, or should be involved, in NWW and is based on a multitude of comments by interested parties across Canada and particularly, of course, by the five committee members.

The committee believes that if all or most of these guidelines are implemented by all those agencies concerned, the NWW program will be greatly enhanced and increasingly successful from year to year in meeting its goal.

Goal statement

The goal is an increasing awareness and appreciation by Canadians about wildlife, especially through the education of youth on the subject, using National Wildlife Week as a focus.

There is much evidence that we do not need to convince children that they should like wildlife. They already appear to have a good grasp of the aesthetic value and importance of wildlife. However, there is considerable room for improving their awareness of the needs of wildlife and the serious nature of the problems jeopardizing the continued existence of wildlife today.

Commitment to the NWW program by politicians, the public, governmental wildlife agencies and non-governmental wildlife organizations is required to help achieve this goal. As communications about National Wildlife Week increase, and the quality of the materials produced for it improves, this essential commitment will grow.

Guidelines for co-ordination and co-operation

NWW teachers' kit

(1) Rotating advisory committee - An advisory committee comprised of two governmental wildlife agencies and two NGWOs should be named each year at the Federal-Provincial Wildlife Conference to act as advisers to the Canadian Wildlife Federation (CWF) for the preparation of the teachers' kit and other materials. It will be the committee's responsibility to review all materials with whomever they deem necessary to ensure accuracy of content, appropriateness of educational level, and quality and relevance of materials to all of Canada as much as possible.

(2) Target audience - The target educational level should not be beyond senior elementary, and ideally is grades 4, 5, and 6, which usually include 9- to 12-year-olds.

(3) Theme of NWW kit - The theme should be decided 21 months in advance at the Federal-Provincial Wildlife Conference. Simple and specific themes should be chosen so that teachers can readily focus on the subject and students can better grasp it.

(4) CWF continue to use professional educational materials writers - Kit text should be written each year by an expert (who may be a teacher) to ensure that the writing level is appropriate for elementary teachers to easily translate for their students subjects that they themselves may not be familiar with.

(5) Kit materials - Kits should contain more activity-orientated materials for the children themselves, such as games and puzzles, that the teachers may copy or provide to the students in some way. Organizations should investigate the feasibility of using appropriate Project WILD activities in the kit.

(6) Kit poster - The kit poster should be simple but have great impact and should be nationally representative. It should continue to be made available in quantity, separate from the kits, to increase visibility and permit low-cost promotion.

(7) Other uses of kit - Provinces should provide an information sheet to teachers about where the kit theme and materials can be used in curriculum areas throughout the year. Curriculum experts in each province could be asked to prepare this as a stuffer for each province's kits. (This was done successfully by Newfoundland and Labrador in 1984.) The aim here is that the kit may be used throughout the year, and may be used year after year because the theme relates to various parts of the annual curriculum.

(8) Education ministry support - Wildlife agencies should obtain as much support for the NWW kits as possible from the appropriate area of their education ministries. Letters of direction to school principals about the NWW kits, review of materials by curriculum experts, and dissemination of the kits to schools are helpful methods of support that can be sought.

(9) Reference list - The kit should contain some information on what other materials are available to teachers on each year's theme, and where to obtain such information.

(10) English and French kits - CWF should continue to provide equivalent materials in English and French.

Other materials

(11) Film - Since the theme for NWW will be set 21 months in advance, there will be ample opportunity to produce a short (10-minute) film on the subject during that time. The feasibility of such a film should be investigated by CWF.

Contests/Awards

(12) Monitoring attitudes - The national contest/awards portion of the NWW program is a good way of monitoring the attitudes of children toward wildlife, and in turn the success of the NWW educational program and other wildlife educational programs within the provinces and territories. A review of progress in educating children about wildlife, using this contest/award information and other information, such as Project WILD, should take the form of a report to the Federal-Provincial Wildlife Conference every 5 years, beginning in 1985. The governmental and non-governmental agencies would submit their reviews to CWF by April 1985 for consolidation into the report to the FPWC in June.

(13) Broaden scope of contest/awards - The scope of the contest/awards should be broadened to include prose or poetry or a wildlife project.

(14) Winners declared - Judging of the contest/awards should be carried out and winners notified with as much fanfare as possible within the current school year.

Kit distribution

(15) Numbers determined - Agencies requiring kits for distribution will notify CWF of the numbers in English and French needed by 30 June annually.

(16) Availability of kits - Kits will be available for distribution to teachers by 31 January each year.

(17) Broaden distribution - Participating agencies should consider taking a hand in broadening the distribution of NWW kits to groups such as Boy Scouts, Girl Guides, 4-H Clubs, etc., where the age range is 9- to 12-year-olds.

(18) Review distribution system - All wildlife agencies should review their distribution system regularly to ensure that it is the most efficient and effective means of getting NWW materials to the target-group teachers and other groups.

Promotion

(19) Communications plan - Each province or territory should write a communications plan for NWW annually that includes an outline of the co-ordinated efforts of all the wildlife agencies in the province or territory. This will serve to begin discussions and co-operation of wildlife groups within the province or territory.

(20) National promotion strategy - CWF should consider developing a national promotion strategy each year, including television and radio public-service announcements, to maximize effective communication about NWW. This need not be costly, as many networks could be persuaded to provide some free time.

(21) Teachers' publications - An excellent communications method is the placement of articles and announcements regarding NWW in teachers' journals or newsletters, especially those of specific associations or councils such as elementary teachers, science teachers, outdoor education teachers, environmental science teachers. Most teachers belong to some teachers' organization and there is usually no charge for this kind of advertising in their publications. This ensures early awareness of teachers about the NWW program.

(22) Teachers workshops and professional development days - Wherever possible, workshops for teachers or discussions with teachers at their PD days on the NWW program theme should be given by both governmental and non-governmental wildlife agencies. Teachers will get more ideas out of this than they will by just reading the kit materials.

(23) Nature and science centres - Provinces and territories should ensure that all nature and science centres within the province or territory receive as much information on NWW as possible, so that they can promote it further in their programs to young people and adults.

(24) News releases - Maintain media coverage through low-cost news releases.

(25) Exhibits - With 21 months' lead-time, exhibits and other communications material can be assembled by both governmental and non-governmental wildlife agencies for use during NWW, and do not need to be designed so that they are dated and not useful afterward. Shopping malls are excellent locations for placing exhibits, but every opportunity at popular events should be taken.

Special events

(26) Ambassador - Some success in using a "celebrity ambassador" to promote NWW has been achieved. Provinces and territories might like to try this, and CWF might wish to have a "national ambassador" appear on radio and television to help promote the week and make it more nationally cohesive in character.

(27) Awards - Having NWW award winners receive their prizes in front of the legislative assembly or at annual conventions of wildlife agencies or similar special events is an ideal way to promote pride of achievement for young people and a higher profile for NWW.

(28) Proclamations - Signing ceremonies with mayors of municipalities or other dignitaries can help promote NWW and gain local support and media coverage.

(29) NWW activities should be co-ordinated with the 1985 "Year of the Youth", and specifically the Youth Science Foundation's April 1985 activity.

Involvement

(30) Joint involvement - All governmental and non-governmental wildlife agencies should make an effort to be involved in NWW. Communication among agencies is a key to co-operative and co-ordinated activities that will promote sharing the work-load locally. Organizations should be able to set aside their philosophical differences and work together for something they all believe in.

(31) Local working groups - The provinces and territories should form their own standing committee, including members from governmental and non-governmental wildlife agencies, to liaise with the national rotating advisory committee and to co-ordinate the organization, delivery, and review of local programs.

(32) Speaking engagements at schools - Both governmental and non-governmental wildlife organizations should continue or increase the contact of their staff with school-children during NWW. There is no other method that has as much impact as this, and it ensures the proper interpretation of the kit materials.

(33) Special urban efforts - Special efforts should be made to focus on and deal with children from urban environments, who are noticeably more unaware of the values and needs of wildlife.

Feedback

(34) National evaluation form - CWF should develop a simple, one-page evaluation form about the kit materials to be inserted in the kit to gain feedback from teachers.

(35) Annual review of activities - Each province or territory should review its involvement and activities during NWW and report to CWF by 30 May. CWF can then report highlights from across Canada at the Federal-Provincial Wildlife Conference each June. This should be a job for the local working group of the province or territory.

The big picture

(36) Wildlife education across Canada - NWW must be a part of a larger context of educational programs about wildlife that is inherent in all the provinces and territories. This big picture should also include Project WILD.

Update report
"Canadian Wildlife Management Institute" (1)

INTRODUCTION TO UPDATE AND DISCUSSION

R. Andrews
Alberta Fish and Wildlife Division

I had the privilege of chairing the Task Force, with the likes of Ken Brynaert and Doug Pollock, to address Recommendation No. 15 of the 47th Federal-Provincial Wildlife Conference. That recommendation was that the Task Force established under Recommendation No. 12 of the 1982 conference should:

(1) proceed to encourage the formation of a "Canadian Wildlife Management Institute" which would -

    (a) promote the conservation of Canadian wildlife and excellence in the practice of wildlife management, and

    (b) as part of its role, sponsor an annual "Canadian wildlife conference", and

(2) whatever interested parties are prepared to sponsor such an Institute, present a proposal setting out their aims, objectives, and sources of funding to the 1984 conference.

We have found that it has taken us a little longer to proceed with this task than we had originally envisaged. What we have done is to retain a consulting firm, Diomedea Consultants, in the person of Dr. Louis Lemieux, and to request that he examine the concept and make recommendations to us respecting a framework for the establishment of a "Wildlife Management Institute". I would like to call on Dr. Lemieux to present his report.

(After Dr. Lemieux's report, Mr. Andrews continued with the Task Force's recommendation.)

Although the Task Force found that it took a little longer than we had anticipated to look into this matter, we thought it was time well spent to have somebody, who had not been involved in the generation of the idea, to step back from it and take a look at the proposal. To that end, the recommendation of the Task Force is that we be instructed to address the question of potential sponsorship and report to next year's conference with what we feel might be a possible option.

(Dr. Lemieux's report follows.)

'Canadian Wildlife Management Institute" (2)

FRAMEWORK FOR A "CANADIAN WILDLIFE MANAGEMENT INSTITUTE"

Dr. L. Lemieux
Diomedea Consultants, Ottawa

Background

The 47th Federal-Provincial Wildlife Conference (Edmonton, 1983) carried the following recommendation:

Recommendation No. 15 (Canadian wildlife management institute)

....it is recommended that the Task Force established under Recommendation No. 12 of the 1982 conference:

(1) proceed to encourage the formation of a Canadian wildlife management institute which would:

  (a) promote the conservation of Canadian wildlife and excellence in the practice of wildlife management, and

  (b) as part of its role, sponsor an annual Canadian wildlife conference, and

(2) that whatever interested parties are prepared to sponsor such an institute, present a proposal setting out their aims, objectives, and sources of funding, etc. to the 1984 conference.

Acting upon that recommendation, the Task Force (R. Andrews, K.A. Brynaert, and D.K. Pollock) asked Dr. Louis Lemieux (of Diomedea Consultants, Ottawa) to carry out a study under the following mandate.

Mandate

The terms of reference for a report that will provide a framework for the establishment of a "Wildlife Management Institute" are:

(1) to recommend a structure for the organization, which would include suggestions for initial sponsor;

(2) to develop guidelines for membership that would include the broadest interests (e.g. commercial, recreational, government membership, must comply with objects: native, etc.);

(3) to develop goals and objectives (as broad as possible);

(4) to look into funding possibilities;

(5) to look into feasibility of a "National wildlife conference" that would include forestry, fisheries, museums, government wildlife agencies, etc.

(6) to recommend a suitable definition for wildlife;

(7) to estimate costs of setting up a "Wildlife Management Institute", with the possibility of co-operators to reduce cost (office space, secretarial service at no cost, etc.).

Methodology

One purpose of the study was to ascertain the need to form a "Canadian Wildlife Management Institute" (CWMI) and, if the need exists, to propose goals and objectives for it. This was done through a review of the Transactions of the Federal-Provincial Wildlife Conference (FPWC) and of other documents that have emanated from it, and by consulting some members of the conference; by determining the requirements of the conference and the extent to which they are met, the potential role of an Institute may be clarified. In other words, could an Institute help resolve some of the issues facing members of the conference? Consultation took place with the following persons, whose contribution is gratefully acknowledged: K.A. Brynaert, D.H. Gimmer, D. Neave, D.K. Pollock, J.D. Roseborough, R. Andrews, B. Tétrault, J.A. Keith, J. Cinq-Mars, and P. DesMeules.

It was essential for the conduct of this study to explore the functioning of the Wildlife Management Institute based in Washington, DC. A meeting took place with the President of the Institute, Daniel Poole, who very generously shared his time and expertise with the consultant; we express our sincere thanks to Mr. Poole.

The issues

Recommendation No. 15 of the 47th FPWC recognizes the existence of issues that need to be addressed in co-operation with, or by, non-governmental organizations (NGOs), but it remains vague on the nature of these problems. The basis for encouraging the formation of a CWMI reads as follows:

> "whereas there is a general consensus among the delegates that wildlife management in Canada is at the cross-roads of a new era, in which leadership and participation of non-governmental organizations in the identification and resolution of national wildlife issues is fundamental,
>
> therefore it is recommended that...."

Through reference to the Transactions and other papers of the FPWC, and meetings with individuals, the following issues were identified (no doubt there are others):

- The need to promote the integrated management of natural resources: forests, land, water, wildlife.

  In arranging the Forestry and Wildlife Management Symposium in 1984, the FPWC recognized that "the exchange of management and research information among managers" was a valuable step towards integrated management. All possible means to facilitate such exchanges should be explored.

- The need to seek improved legislation in the interest of wildlife.

Examples are the lack of protection provided to invertebrate and plant species; lack of legislation to govern the draining of wetlands, etc.

- The need to urge and facilitate co-operation, in cases of conflict, between agencies within a government or between governments.

- The need to seek increased funding for wildlife management agencies.

  An example is the earmarking of certain tax monies for wildlife management programs.

- The need to stimulate interest in management-orientated research and studies.

- The need has been felt by some wildlife administrators for a better structural system to channel communication, guidance, and direction between the several levels of administration and the public.

  One suggestion calls for a setting up of a "Wildlife Ministers' Conference", a "Deputy Ministers' Committee", and a "Directors' Committee". The directors would meet twice a year, once being at the time of the FPWC, which would become the major annual public forum for the discussion of wildlife issues in Canada, and for the exchange of views among sectors of the interested public, and between the public and government agencies.

  That could be a pattern for a "Canadian wildlife conference".

- A need has often been expressed by committees of the FPWC to encourage, or press for, implementation of programs or proposals such as the "Guidelines for wildlife policy in Canada".

A role for a "Canadian Wildlife Management Institute"?

Given a list of issues as presented, the question arises whether the NGOs now active in Canada can satisfactorily co-operate with governmental agencies towards their solution, or if there is good reason for the forming of a new organization.

The NGOs interested in wildlife matters participate in the FPWC, some annually, others whenever possible. In their reports to the conference, they mention their objectives, their programs, and their activities. A perusal of the conference Transactions shows that some of the NGOs work in support of wildlife and its habita' while others represent the interests and aspirations of those who derive enjoyme. or benefit from wildlife or nature. Some are engaged in activities supportive of management programs, others seek to influence political decision-making; many NGOs are involved at both levels, and all do their share to educate the general public. (That is a succinct expression of what they contribute).

Still, the managers and administrators feel that they need the support of another independent group to assist them in their efforts towards better legislation and improved management, as evidenced by the following statements made during the 1983 conference. It is reported in the Transactions of the 47th FPWC that:

> "Mr. Andrews pointed out that what is envisaged as a "Canadian Wildlife Management Institute" is much broader than simply a conference. It is an

evolution towards...an organization of expertise, dealing with the national issues of wildlife, with perhaps less of a vested interest than the...confines of each specific interest group; somewhat analagous, but not completely, to the American Wildlife Management Institute. There needs to be a centre of excellence in wildlife management in Canada, somewhat unfettered from political masters. There is a need for a national organization, staffed by recognized professional wildlife people who can speak out in the context of having such a reputation that, when they meet privately with different organizations, due consideration will be given to their words".

The Transactions then report comments by R.C. Goulden:

"He reaffirmed what Mr. Andrews had explained that the job of a "Wildlife Management Institute" is not only to hold a conference once annually; if that were its main aim, it would not work. It is his opinion that they (sic) need such an institute to do such things as:

(1) promote more professional wildlife management,

(2) from time to time, take issue with governments who are not managing well,

(3) be called in by governments to analyze their organizations, their operations, and their programs,

(4) give better direction to governments, and

(5) sponsor the development of policies, programs, and special studies."

A look at the US scene shows that, despite the existence of several NGOs doing a good job in the interest of wildlife, and of those who use it and benefit from it, the Wildlife Management Institute fulfills a very important role.

The findings of this study show that there is indeed a role for a Canadian institute, modelled along the lines of the (US) Wildlife Management Institute, to act in co-operation with existing NGOs and governmental wildlife management organizations. A model for a "Canadian Wildlife Management Institute" is therefore submitted.

The "Wildlife Management Institute of Canada"

A proposal

The "Wildlife Management Institute of Canada" is a non-profit professional corporation dedicated to the conservation and enhancement of wildlife in Canada. Wild animal populations will thrive and prosper inasmuch as the quality and quantity of their habitat is maintained and improved, and the improvement of wildlife populations and of their habitat is the role of wildlife management. The purpose of the Institute is to promote and support the formulation and implementation of the best management programs and practices for the wildlife of Canada.

The "Wildlife Management Institute of Canada" considers wildlife to include all the indigenous plants and animals of Canada and their habitat. However, since the conservation and management of fish populations is a distinct and specialized

field, the Institute will encourage and support initiatives towards the establishment of a professional body that would promote improved management of sport fish populations.

Working in the interest of wildlife, the Institute considers it as its constituency. The maintenance and enhancement of wildlife will benefit those who enjoy and use it for aesthetic, recreational, subsistence, or economic purposes, but those sectors are the concern of the several organizations that represent the various categories of users. Since it represents the interests of the resource rather than those of the users, the "Wildlife Management Institute of Canada" will not undertake to develop a public membership as a means of support; but it will work in unison with public-interest groups whenever desirable.

Objectives

The "Wildlife Management Institute of Canada" endorses the objectives of the "World conservation strategy" and of the "Guidelines for wildlife policy in Canada"; they are:

(1) to maintain the ecosystems upon which all life depends;

(2) to preserve the diversity of species, which enables ecosystems to function;

(3) to ensure that the enjoyment and use of wildlife is sustainable.

Based on the above, the objective of the "Wildlife Management Institute of Canada" is:

to further the conservation and enhancement of wildlife populations in Canada.

In order to fulfill its objective, the Institute will pursue the following goals:

(1) To improve the management of wildlife in Canada:

- by urging and supporting the passing of legislation that will contribute to the maintenance and improvement of wildlife habitat;
- by seeking increased and adequate support for governmental wildlife agencies in Canada;
- by helping to improve governmental wildlife programs through the promotion of increased co-operation between agencies and levels of government, the evaluation of programs, and other suitable means;
- by assisting in the conduct of wildlife management programs through the provision of expertise;
- by encouraging the conduct of management-orientated research, and the training and professional development of wildlife managers.

(2) To improve the consideration given to the recreational and economic values of wildlife in man's use of land and water:

- by encouraging concerted planning by all agencies involved in the management of soil, range, forest, water, and wildlife resources, so as to bring

about programs based on scientific knowledge and conducive to the restoration, conservation, and enhancement of wildlife habitat.

(3) To generate public support for rational resource management practices and for well-conceived use programs that ensure that no resource is utilized beyond its sustainable level or to the detriment of other resources:

- by informing the public of the interrelationship between renewable resources;
- by helping the public develop sound and objective viewpoints on matters related to the utilization of wildlife and its habitat;
- by focusing the attention and efforts of other non-governmental organizations on wildlife issues.

Organization

A non-profit private corporation, the "Wildlife Management Institute of Canada" is governed by a Board made up of:

- individuals experienced in resource management (wildlife, forests, range, soil, water),
- individuals representing the public sector (could be nominated by NGOs),
- sponsors.

The Institute is administered by a small professional staff under the direction of a President. The Institute will draw additional expertise under contractual arrangement as the need arises, and may eventually add regional representatives as the need arises and circumstances permit.

Funding

Since it works towards the enhancement of wildlife rather than in the interests of the users, the Institute will not undertake to build a membership. It will raise funds from corporate entities that benefit from wildlife, or whose activities affect it adversely, and will accept contributions from benefactors, individual or corporate. The Institute will charge a fee when its services and expertise are sought in the form of a consultancy. Preferably, the Institute should strive for support from a fairly large number of contributors.

Costs

It may be useful or interesting to note that the Wildlife Management Institute (US), with a staff of 8 professionals (3 in Washington, 5 in the field) and 10 support staff (in Washington), operates with a budget ranging between $800 000 and $1 million. Assuming that the "Canadian Institute" would operate with a staff of 3 professionals and 3 support persons, one could guess that its budget would be at the $400 000 to $500 000 level.

That seems reasonable according to a breakdown in Table 1.

Table 1. A budget for the "Canadian Institute"

Salaries	
3 professionals @ $50 000	$150 000
3 support staff @ $20 000	60 000
	210 000
Travel	
3 @ $10 000	30 000
Office rental and services	160 000
Total	$400 000

Implementation strategy

How can the CWMI be launched? Here are some considerations:

(1) The Wildlife Management Institute (US) came into existence in 1911 because a corporate sponsor wanted it to be, and has continued to support it to this day. Although the likelihood of this happening today is doubtful, it may be worth exploring, but the risk of relying on a single source of funding militates against this option.

(2) If the government members of the FPWC and some of the NGOs associated with it felt that "the formation of a 'Canadian Wildlife Management Institute' must be encouraged" (Recommendation No. 15, 1983), then perhaps they are prepared to fund it in its initial stage. That also is a doubtful option, but government support for the holding of an annual conference should be sought.

(3) The time-frame allocated to the task of devising a framework for a "Canadian Wildlife Management Institute" did not allow for the development of a funding strategy for it. If the general concept suggested here is accepted, then the funding of the Institute can be elaborated. Obviously, the Institute could operate initially at a lower level of staffing than suggested, expanding gradually. The extent to which the Institute could generate funds by carrying out contract work should be explored. As an operational plan and budget are designed, potential sponsors and supporters can be approached and identified.

Activities and programs

(1) "Canadian wildlife conference"

The Institute will organize an annual "Canadian wildlife conference" to be a public forum for the discussion of wildlife issues in Canada, and for the

exchange of views among sectors of the interested public, and between the public and governmental agencies. The theme for a conference will be chosen either by the FPWC or by a "Conference program committee" that will be struck each year, and on which governmental agencies and NGOs will be represented.

(2) Other programs

These are merely offered as examples of what the CWMI could do; no priority is suggested and many other activities could be undertaken:

- Promote, and assist with, the implementation of the "Wildlife conservation strategy" in Canada.

- Promote the undertaking of the actions recommended under "Guidelines for wildlife policy in Canada".

- Seek legislative measures that will afford all species of wildlife the protection and management measures required.

- Urge and facilitate co-operation between governments and governmental agencies to resolve jurisdictional or inter-agency conflicts detrimental to wildlife interests.

- On demand, evaluate the efficiency of governmental programs and agencies.

- Assist governments in finding appropriate solutions to problems such as predator control, utilization of wildlife, etc.

"Canadian Wildlife Management Institute" (3)

SUMMARY OF DISCUSSION

G. Sheehy (Canadian Nature Federation) asked how, generally, this Institute would relate to such existing organizations as the Wildlife Biologist Section of the Canadian Society of Zoologists, the Wildlife Society of Canada, or Habitat Canada.

R. Andrews (Alberta Fish and Wildlife Division) replied that there would be no direct relationship; it would be what was envisaged as an independent, separate body. Habitat Canada was an independent, separate body. The Canadian Association of Wildlife Biologists was a professional society. Each of these institutions had its own role and function, as was the case with the Wildlife Management Institute in the United States. Distinct entities would be what they were proposing. On the other hand, he thought that anyone who had been associated with the North American Wildlife Conference would recognize the tremendous benefit of a number of professional and non-governmental organizations scheduling their meetings in concert with the North American. It provided a tremendous opportunity for all sorts of organizations to take advantage of the presence of each other, and it had been envisaged that possibly such an approach might be feasible in Canada.

B. Tétreault (Canadian Wildlife Service) said that he had some difficult with the identification of possible sponsorship. First of all, the corporations that would be tempted to invest in this particular Institute would surely see it in terms of returns of some sort. Assuming that the Institute would be successful in finding a proper sponsorship, it would be in competition in terms of money with other NGOs. He saw some difficulties downstream.

R. Andrews replied that it was precisely for that reason that they had requested some additional time to further explore the feasibility of how this might come into being. He pointed out, though standing to be corrected on this question by the NGOs, that the general impression he had received in discussing it with some of them was that the role of corporate financing with respect to many NGOs was relatively insignificant. In fact, most of those organizations were by-and-large funded through individual contributions. However, he could not generalize about all NGOs.

K.A. Brynaert (Canadian Wildlife Federation) confirmed this point, saying that certainly from the CWF's standpoint, corporate funding was insignificant. With a budget of $7.3 million, they had corporate funding of $26 000 or so.

M. Hummel (World Wildlife Fund Canada) spoke from a little different perspective, saying that WWF Canada had 350 corporate supporters, which maybe reflected a difference in being based in Toronto as opposed to Ottawa. He wanted also to offer three comments on Louis Lemieux's report. First, he thought the idea that such an agency would have wildlife as its constituency rather than wildlife users was refreshing and important, and its reliance on the "World conservation strategy" was something that certainly WWF would support. Second, the idea that the annual conference would somehow be an airing of national wildlife issues, and some of Rich Goulden's ideas that it might be a referee to comment on jurisdictional policies on various wildlife issues in a neutral and fair way,

were also very interesting and worth pursuing. It might pep the meetings up beyond control in some cases. Third, on funding, he thought that Dr. Lemieux was fairly open about the fact that that question just had not been answered, and that was why they were interested in a Task Force to look into it further.

His own feeling was that, strictly from a financial standpoint, the present structure of the Federal-Provincial Wildlife Conference had a lot going for it. The governments were committed and there was a governmental funding base for the annual gathering. Lots attended this meeting because the governments were committed to it and because they were present; it was a unique gathering in that respect. He did not have any firm ideas, but WWF would be interested in contributing something in the future on the whole funding side. The conference should hold on to that fundamental governmental commitment to provide some financial participation in terms of making available the Directors of Wildlife and having different organizations host it every year. He had a feeling that what might happen if this was totally privatized was that, within a couple of years, there would be some wistful looking back to the days when governments had this as part of their budgets; the annual meeting had at least come off on the basis of that kind of commitment. So, if they could hang on to that element and funding base, at least for the annual conference, it would be fiscally wise.

J. Baird (New Brunswick Fish and Wildlife Division) asked if Dr. Lemieux's report would be made available to the voting delegates. He was told by R. Andrews that it would.

J.D. Roseborough (Ontario Wildlife Branch) asked what recommendation was going to be presented to the Recommendations Committee.

R. Andrews replied that the recommendation would be to charge the Task Force with deliberating on this for one more year with respect to examining the alternatives and feasibilities respecting sponsorship. They would certainly broaden their base in terms of ideas, and welcomed the offer of WWF to be of some assistance in this regard.

J.R. Sloan (Ontario Ministry of Natural Resources) suggested that it would be premature to pursue, in isolation, the feasibility of sponsorship before they dealt with the fundamental proposal in front of them. Was there indeed a need for a "Canadian Wildlife Management Institute"? If there were recommendations coming forward at the conference, he hoped that they would not just be to deliberate over the feasibility of corporate sponsorship, but would come to grips with the fundamental question of whether or not there was indeed a need for an Institute.

R. Andrews said that the original mission of the Task Force was to examine both of these things at the same time. Perhaps he did not make it sufficiently clear. Unfortunately, they had found that they were not able to complete that mission within the time period they were given, but in light of the fact of that they had had Dr. Lemieux prepare a report, and that they were on the agenda, they took this opportunity to provide an interim response to their charge.

R.G. Morgan (Ontario Federation of Anglers and Hunters) wished to support the comments that John Sloan had just made, because he had his own concerns. He asked that the Task Force, as they considered funding over the course of the next year, should not just consider whether funding would be available for such

an Institute, but examine it very carefully, and talk to NGOs quite extensively, to determine what effect any funding going to an Institute might have on those NGOs. They had already had two rather diverse viewpoints expressed, and he was sure many of them would want to express their concerns or feelings as to whether indeed such a funding mechanism would affect them. There was a lot of competition out there, and he would like that very carefully examined, not just from the perspective of the Institute.

R. Andrews replied that he might reiterate that it certainly was not the charge of this Task Force to come back in and say, "Here are the sponsors that will do it all". What they were doing was testing the waters, as it were, so that they could report whether or not there was any possibility of believing that it was feasible to search out corporate sponsorship or any other form of sponsorship.

J.D. Roseborough said he was led to believe that the Task Force was going to present a recommendation to the Recommendations Committee for the formation of a "Wildlife Management Institute" based on certain principles and goals, with the idea that eventually there would be corporate funding.

R. Andrews told him that the recommendation that would be offered would be that the Task Force should be given an additional year to complete its original assignment.

J.D. Roseborough said he had hoped that they would have something a little more definitive a little sooner. The Task Force were going to table their report, and it was going to be made available to the NGOs as well as the governmental organizations by the end of that meeting. Was that correct?

R. Andrews replied that it was not correct. In response to the previous question, he said he would make the interim report available to the voting members of the conference. He added that he would like, on behalf of the committee, to express their appreciation to CWS and those western provinces who saw fit to contribute to the retainment of Dr. Lemieux.

Y. Dubé (Quebec Ministry of Recreation, Hunting, and Fishing) suggested to the members of the committee that if they had a second look at it, they should also look at the name of the Institute. Management was something that was under the authority of provinces, he thought. Maybe they should talk about a "Canadian Wildlife Institute" if they had to.

K.A. Brynaert said that he might be wrong, but last year it had seemed to him that when Bob Andrews filed his report, they had accepted the fact that there was going to be a "Wildlife Management Institute". Their mandate was then extended to bring back before this body the mechanism and the structure that it would take.

R. Andrews replied that it had never been accepted that there would be a "Wildlife Management Institute". They were simply exploring the proposition and the feasibility.

D.K. Pollock (Canadian Wildlife Service) stated that perhaps the report should also go to the other NGOs. He did not think it would be equitable, seeing that the Canadian Wildlife Federation was on the Task Force, for them to have the information and not the other national NGOs.

K.A. Brynaert asked if there was any way they could get around the problem of "accepting it, but not accepting the principles". Otherwise they were going to spend another year trying to put something together, and they might get an expression out of this conference saying that it did not like their structure.

R. Andrews felt quite strongly that they should work within the mandate that they were given until they had completed that task.

J.D. Roseborough said that the Task Force's recommendation was going to be that they be given an extension on this job. There had been a question on whether an Institute was actually needed or not. He asked if there were any motions that they could consider for the Recommendations Committee.

R. Halladay (British Columbia Fish and Wildlife Branch) said that it seemed to him that the Task Force that had been struck was in a very good position to judge how far along they were in completing their task. As he understood it, their task was to explore the value and the operation of an Institute, so that this conference could adequately ascertain whether or not it should go beyond that to promote the formation of an Institute, and support it in perhaps a variety of ways. Part of that was to look at the potential for funding. He thought it logical that the Task Force should be allowed to complete its task. It was regrettable perhaps that it had not been able to do that within the set time-frame, but it was understandable at the same time. The individuals they had chosen were very busy with many things. From his point of view, he would like to see them given a mandate to continue and complete the task.

J.D. Roseborough asked for some indication of whether that would be an acceptable recommendation: that the Task Force continue to examine the objectives, the goals, the purposes, and the potential funding of an Institute for presentation at the next Federal-Provincial Wildlife Conference.

R.C. Goulden (Manitoba Wildlife Branch) said that he accepted that with one minor modification, and that was would it be possible for the Task Force to conclude their work in sufficient time to circulate a report ahead of time, so that when members came to the conference, they could come with a sort of go/no-go proposition in front of them and be able to make a decision on it.

(See Recommendations Nos. 11 and 12.)

Update report
Value of wildlife (1)

ACTIONS RESULTING FROM RECOMMENDATIONS

F.L. Filion
Canadian Wildlife Service

This update's objective is to document actions that followed Recommendations Nos. 9 and 10 (see Appendix 1) of the 47th Federal-Provincial Wildlife Conference, and to offer recommendations on future activity.

1. Value of wildlife in the North (Recommendation No. 9)

This recommendation asked that the feasibility study on commercial and subsistence wildlife values for native people, conducted by Dr. P.J. Usher in the Northwest Territories, be extended to the northern and remote areas of Newfoundland, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, and the Yukon.

A. Feasibility study

Dr. Usher was retained under contract for the above-mentioned purpose during the summer. A meeting of all agencies concerned was called for 3 August 1983 according to the terms of the recommendations. The meeting was later cancelled since only one province was able to delegate a representative to attend. Dr. Usher obtained the required information on game and fur harvesting records partly by mail and telephone, and partly from his personal knowledge and documents.

Dr. Usher's report, entitled "The use of official fur and game harvest statistics in evaluating the commercial and subsistence production of wildlife in northern Canada", was presented to the Wildlife Directors' Committee meeting in September 1983. It commented on the existence, comprehensiveness, and accuracy of available records on the volume and value of wildlife products, such as meat and furs, for the above-mentioned jurisdictions. It also discussed the feasibility of quantifying the economic value of this production and the approximate estimated costs of doing so. He offered a definition of northern or remote provincial areas, and noted that the majority of commercial and subsistence harvests in practically all of the jurisdictions were taken by native people. He also provided tentative ratings of provincial fur and game harvest reporting systems, for the purpose of estimating the commercial and subsistence values of wildlife harvests.

Dr. Usher concluded that:

(1) fur production records were probably adequate to estimate commercial value in all but three jurisdictions (namely British Columbia, Quebec, and Newfoundland) where additional work was required; and

(2) that game harvest records were inadequate to estimate subsistence values, thus requiring considerable additional research.

As seen in column A of Table 1, Dr. Usher estimated that the cost of measuring wildlife value in the North would be no less than $350 000 to $400 000.

Table 1. Comparison of cost estimates (in 1983 dollars) for quantifying the value of wildlife in the North according to two different consultants*

Task	Cost estimates	
	A. Dr. Usher	B. Dr. Feit
(1) Improving quality of commercial production data in 3 jurisdictions (3 x $5000)	$ 15 000	$ 15 000
(2) Estimating commercial and subsistence values in provinces and Yukon	200 000 (8 x 25 000)	320 000 (8 x 40 000)
(3) Estimating commercial and subsistence values in NWT (see previous feasibility study)	60 000	60 000
(4) Workshop for estimating value of wildlife meat consumed	25 000	25 000
(5) Workshop on evaluating "way of life"	50 000 to 100 000	-
(6) Determining non-economic indicators of "way of life"	-	100 000 (10 x 10 000)
(7) Workshop for estimating non-monetary indicators of "way of life", activity, and option and bequest values	-	25 000
(8) Aid to facilitate native NGOs' participation	-	?
Total	$350 000 to 400 000	$545 000+

* Total costs do not include the additional cost of a mail survey on the recreational values for non-natives in NWT and Yukon, or any report publication costs that might arise. This would be likely to add another $70 000 to the total estimate in columns A or B.

B. Critical review of feasibility study

Given the complexity and cost of estimating the above-mentioned values, it was recommended that the opinion of a second consultant be sought. This recommendation was supported by the Wildlife Directors' Committee meeting in September 1983. Dr. Harvey Feit was asked to critically examine Dr. Usher's proposal, bearing in mind the following:

(1) the potential usefulness of the resulting values;

(2) the concepts presented,

(3) the feasibility of capturing the values identified,

(4) the practical approach proposed, and

(5) the estimated costs.

Dr. Feit's review is generally quite supportive of Dr. Usher's basic approach and framework, which he has qualified as "generally excellent proposals". Dr. Feit offers suggestions on how to improve the comprehensiveness and accuracy of Dr. Usher's proposed research by extending its scope to:

(1) include non-monetary indicators (i.e. quantitative or qualitative non-monetary descriptors that shed light on "the way of life" values);

(2) obtain more detailed subsistence data; and

(3) seek the official involvement of native NGOs to optimize the political usefulness of the information.

This proposed intensification of Dr. Usher's proposal has implications for the estimated time, travel, and costs required for the work program. Dr. Feit notes that conducting intensive northern harvest surveys similar to those in northern Quebec would probably cost over $2 million to produce data in the first year for the regions covered by Dr. Usher's proposals. Given this point of reference, he suggests that Dr. Usher's estimates may be optimistically low. Dr. Feit believes that the work would require a minimum of $545 000 to complete. A break-down of this estimate by task is shown in column B of Table 1.

2. Comprehensive analysis of the "National survey on the importance of wildlife to Canadians" (Recommendation No. 10)

This recommendation asked that sponsors of the "National survey on the importance of wildlife to Canadians" be invited to comment on the "Proposal for a comprehensive analysis of the results of the 1981 survey on the importance of wildlife to Canadians", and to revise the proposal for presentation to the 14 September 1983 meeting of the Wildlife Directors' Committee.

As explained in Table 2, such an analysis would provide an in-depth look at participants in wildlife-related activities, and the economic values and impacts associated with them. These results will be highly useful in defending and planning programs, and in understanding and communicating with our constituencies. By analysing the results co-operatively, we do a more complete job, with higher cost-effectiveness, than if the work was done in an unco-ordinated, piecemeal fashion.

A. Comments on the proposal

In view of fiscal constraints, it proved impossible to call meetings to discuss the proposal. Comments were received by mail and telephone from all provincial wildlife agencies. Comments either agreed in principle with the proposal or said that it was a sound and desirable objective. Consequently, the proposal was submitted unchanged to the Wildlife Directors' Committee.

Table 2. Reasons why a comprehensive analysis of the Statistics Canada data on the importance of wildlife to Canadians is needed

(1) A number of important survey questions and break-downs have not yet been analysed or published. It is important that this wealth of information be analysed for management purposes.

(2) Given the serious current fiscal restraints, there is an urgent need for governmental and non-governmental wildlife agencies to generate credible socio-economic data that clearly and indisputably document the importance of wildlife and wildlife-related programs. The comprehensive and multi-sponsored 1981 Statistics Canada survey can probably do this more effectively than any other current survey data set. These results can also serve the needs of those developing federal-provincial or international wildlife strategies or programs.

(3) A co-operative analysis is more cost-effective and potentially more useful than a partial ad hoc series of unco-ordinated analyses that may not be complementary or compatible among sponsors. A number of agencies are not in a position to conduct additional analysis on their own, and therefore may not benefit fully from the results.

(4) A methods report is needed:

(a) to help sponsors who will use the results, explain and defend their validity to organizations who will question them;

(b) to explain why these results differ from those of other related sources (licence data, harvest or socio-economic survey results...);

(c) to facilitate additional custom analysis of this complex data set by sponsors; and

(d) to permit future replication of the survey in order to monitor trends validly.

(5) A report on the economic value of wildlife-related activities is required:

(a) to determine the impact of the $4.2 billion spent in 1981 on the economy;

(b) to determine the magnitude of the net benefits that accrue to users via the large consumer-surplus apparently enjoyed by participants;

(c) to derive a sound and acceptable approach to compute economic values that will be comparable across provinces, and

(d) to have wildlife recognized as a resource having significant economic importance in government planning.

Preliminary findings on the economic significance of wildlife-related recreational activities in Canada are contained in Appendix 2 prepared by André Jacquemot.

cont'd

Table 2 (cont'd)

(6) A report on the single and multiple wildlife uses of participants is required:

(a) to document and to gain a better understanding of the similarities and differences that typify the numerous publics who benefit from wildlife management;

(b) to identify potential sources of support and funding for current or proposed programs;

(c) to facilitate communicating with them and to help address users' conflicts.

At their meeting on 13 September 1983, the Wildlife Ministers Conference approved in principle the recommendation that the Wildlife Directors pursue a more comprehensive, co-operative analysis of the results of the Statistics Canada survey data. Because of the absence of Prince Edward Island and Nova Scotia from the Wildlife Directors' Committee meeting of 14 September 1983, the committee elected to delay its final decision on the matter until those provinces had had a chance to consider the Ministers' decision and examine Mr. Filion's summary of the comments received from sponsors to date.

The written comments received from provincial wildlife agencies confirmed the unanimous support for the concept of a comprehensive analysis. Two provinces (Quebec and Alberta) committed money in accordance with the co-operative funding formula contained in the proposal. Five other provinces (Newfoundland, Nova Scotia, New Brunswick, Manitoba, and Saskatchewan) reported that they would be seeking authorization for funding. Although Ontario and British Columbia reported that they would not be able to provide funding, BC did offer expertise to participate in the analysis. The sponsors were asked to rank the proposed reports in the event that a scaled-down version of the proposed comprehensive analysis might be required. The overall ranking, in decreasing order of importance, for the proposed themes was as follows:

(1) methodology,

(2) economics,

(3) profiles of participants in single and multiple uses,

(4) geographic and interprovincial dimensions, and

(5) critical assessment and recommendations.

Because of severe fiscal constraints among sponsors, it has proved impossible to launch the comprehensive analysis proposed. Mr. Filion's involvement in an IUCN conservation project abroad also resulted in the postponement of a revised action plan for launching the analysis.

B. Towards a scaled-down proposal

Based on the positive comments received from the sponsors, a scaled-down version of the initial proposal for a comprehensive analysis of the Statistics Canada data is recommended. The objective would be to produce a version that would be restricted to the three top-ranking themes mentioned above. Some of the reasons why such an analysis is needed are summarized in Table 2.

The reports would be completed within 12 months of the date they were initiated. Assuming adequate funding, as well as rapid funding transfers from sponsors, all three reports could be prepared between now and the next Federal-Provincial Wildlife Conference. Considering the high costs of data processing of this large data set, as well as other costs related to such things as consulting, analysis, travel, and publication, the three reports will cost $200 000. If CWS is able to raise $88 000 from interested agencies, it will provide the balance of the resources required (56% of the total estimated cost) and produce all three reports, in co-operation with the sponsors, during the above-mentioned time-frame. According to this proposal, the ratio of CWS resources to that provided by other supporting agencies would be approximately 1.3 to 1. If CWS obtains less than the total amount required, it will provide partial complementary resources not exceeding the above ratio, and will produce as many reports as the resources made available will allow, according to the above-mentioned ranking of themes. Guidelines on the relative sizes of the funding contributions from provincial and non-governmental agencies are contained in Table 1 of the "Proposal for a comprehensive analysis", submitted last June. Columns A and B in that table could be viewed as potential maximum and minimum contributions per sponsoring agency.

3. Recommendations

A. Value of wildlife in the north

Given the nature and complexity of the tasks and the magnitude of the costs for accomplishing them, it is recommended that sufficient funding be made available by sponsors to initiate parts of the evaluation process in northern wildlife utilization. The work should begin by addressing some or all of the tasks on which there is agreement between consultants on estimated costs (see tasks 1, 3, and 4 in Table 1 of this update). The information and experience gained on these less expensive tasks may serve to clarify the remaining tasks, reveal ways of accomplishing them more economically, and provide time to identify additional sources of funding to complete the work.

B. Comprehensive analysis of the "National survey on the importance of wildlife"

Given the widespread interest for a comprehensive analysis of the national survey results, and knowledge of the overall ranking that wildlife agencies attached to the five reports proposed, it is recommended that interested wildlife agencies inform CWS by 15 July 1984 of the amount of funds they are able to commit to this analysis, and the earliest date at which they are able to transfer the amounts to CWS for deposit in a special suspense account for this purpose. CWS's contribution of resources to the task will be proportional to the amounts committed by other wildlife agencies in a ratio of 1.3 to 1. CWS will, during the 12 months following the receipt of funds, oversee the production of as many reports

as it is possible to produce, given the funds committed and the established preference ranking for the proposed reports.

APPENDIX 1

Recommendations dealing with the value of wildlife to Canadians from the 47th Federal-Provincial Wildlife Conference (1983)

Recommendation No. 9 (Value of wildlife in the North)

Whereas a feasibility study report prepared by Dr. P.J. Usher has been submitted to the Wildlife Directors' Committee in accordance with Recommendation No. 16 (1982 FPWC), and

whereas this report proposed an approach to measure commercial and subsistence wildlife values among native peoples and recreational wildlife values among non-native people of the Yukon and Northwest Territories,

therefore it is recommended that the examination be extended to address the feasibility of measuring these values among native and non-native peoples residing in northern British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Newfoundland, and the Yukon Territory. A committee consisting of a representative from each of these provinces, the Yukon Territory, and the World Wildlife Fund Canada will be created under the chairmanship of the Canadian Wildlife Service. The committee will meet with Dr. Usher on 3 August 1983 to assess the nature of relevant data on the matter, and report to the Wildlife Directors' Committee in September 1983 to decide further action. The benefiting provinces, the Yukon, and World Wildlife Fund Canada will contribute up to $1000 each to defray costs for Dr. Usher's services and for an analysis of the coverage of the Statistics Canada sample in remote areas of the provinces.

Note: Northwest Territories abstained.

Recommendation No. 10 ("Comprehensive analysis of the 1981 national survey on the importance of wildlife to Canadians")

Whereas Canada's first comprehensive survey on the importance of wildlife to Canadians has been completed, and

whereas the highlights of this survey have been published, and

whereas the nature and extent of the information is of vital importance to governmental and non-governmental wildlife management agencies in Canada, and

whereas a "Proposal for a more comprehensive analysis of the results of the survey on the importance of wildlife to Canadians" has been tabled at this conference,

therefore it is recommended that the proposal be sent to governmental and non-governmental wildlife agencies normally represented at this conference, and that

those agencies transmit their written comments on this proposal and the cost-sharing formula to the authors of this proposal by 15 August 1983. The authors will meet in late August 1983 along with representatives of other interested sponsors of the survey to discuss the comments and revise the proposal as required. A revised proposal will be presented to the Wildlife Directors' Committee in September 1983 to decide further action.

APPENDIX 2

The economic significance of wildlife-related recreational experiences

The following are preliminary findings at the national level of a proposed economic report based on the results of the 1981 Statistics Canada survey on the importance of wildlife to Canadians.

Two main kinds of economic benefits derived from the recreational use of wildlife can be estimated. Excluded from this estimation are commercial wildlife products (e.g. furs, eggs, etc.), some intangible values (option value, existence value, etc.), and the economic impact of the expenditures from federal and provincial government programs related to wildlife management.

1. Primary benefits

Primary benefits represent the benefits in terms of satisfaction, utility, enjoyment, etc., obtained from the recreational use of wildlife (hunting, bird-watching, etc.) and accruing to the wildlife users themselves.

As it is with most goods and services (apples, taxi rides, legal advice, etc.) produced in an economy, the wildlife experiences are worth what people are ready to sacrifice to obtain them. In other words, the economic value is equal to what people are willing to pay for it. However, a distinction should be made between the maximum amount people would be prepared to pay for an experience and the amount (or costs) they actually pay for it. The latter is shown as item 1 in Table 3, and the former value is illustrated as item 2 in the table. The difference between actual participation costs for an experience and maximum willingness to pay for it yields an estimate of net value which is shown by item 3 in the table. Each of these three types of values may be used differently in the field of wildlife management.

Table 3. Estimates of economic values for all wildlife-related recreational experiences

(1) Actual costs incurred to participate in wildlife-related activities	$4235 million
(2) Gross value of the experiences (maximum willingness to pay to participate)	4999 million
(3) Net value (2-1) of wildlife experiences to participants	764 million

The results of the 1981 survey conducted by Statistics Canada provide data to estimate each type of value. Preliminary estimates of the total, net and gross values of wildlife-related outdoor experiences assigned by participants are shown in Table 3.

The figures of the first row in Table 3 represent the actual expenditures made by the participants, as reported in the survey, in order to realize their experience. However, respondents would have been willing to pay an additional $764 million for their experiences before deciding to forego them. This sum represents their net benefit for the wildlife experience. Altogether, the almost $5 billion (item 2) represent the total willingness to pay, or gross value for the enjoyment obtained from the recreational wildlife experiences, and for the goods and services purchased to pursue them.

These and other statements of value could be generated by province and for various types of wildlife-related activities for purposes of the proposed economic report.

2. Secondary benefits

Secondary benefits are economic benefits or impacts that result from the fact that participants in wildlife activities spend money in order to enjoy wildlife-related experiences. This spending provides a stimulus to the national, provincial, and regional economies. To determine the economic impact, at the national level, of the expenditures made by the wildlife users, the "1980 input-output static model" of Statistics Canada has been used. Economic impacts are composed of direct, indirect, and induced effects. The distinctions among them may be illustrated by considering what happens when a hunter buys a rifle at a store, which constitutes the direct effect. The retailer has to restock his inventory through the wholesaler, who in turn obtains the rifle from the manufacturer, who has fabricated the rifle from the metal provided by the iron-and-steel industry. The additional income thus generated for the four parties involved goes towards paying salaries, buying equipment, renting premises, etc., and represents the indirect effects of the purchase of the rifle.

But this is not the end of the story. The bulk of the wages and salaries paid, the profits distributed, etc., to the households during the above process will be spent on goods and services, and will in turn generate new sources of income for other parties. These latter effects are called induced effects. Table 4 shows two of the many preliminary economic indicators found in the Statistics Canada impact simulation, based on the expenditures that wildlife users reported in the 1981 survey. These results include the above-mentioned direct, indirect, and induced effects of the expenditures of participants, and show that this spending of $4235 million resulted in sizeable impacts on gross domestic production and employment in 1981. Table 4 reveals that the impact on the gross domestic production of users' expenditures exceeded $9.3 billion. This may be expressed in another manner, using the multiplier. In other words, for every $1.00 spent by participants in wildlife activities, $2.21 of economic activity were generated in the Canadian economy.

Expenditures associated with wildlife activities also have a significant impact on employment. For every $1.00 spent by wildlife participants, it is estimated that $0.70 went as income, which exceeded $2.9 billion in total. It is also estimated that expenditures on wildlife activities resulted in the creation of more than 184 000 jobs (person/years) in 1981.

Table 4. Economic impact of wildlife-related expenditures of $4235 million (1981) on the Canadian economy

Economic indicators	Estimated total impact, including direct, indirect, and induced effects		
	$(million)	Jobs (person/years)	Multiplier
Gross domestic production*	9349		2.21
Total employment†			
- Income	2965		0.70
- Total jobs created		184 865	

* Gross domestic production represents the value of the sum of sales of the goods (e.g. cars, iron, shells, etc.) and services (e.g. transportation, outfitters, restaurants, etc.) produced in Canada.

† Employment - "income" and "total jobs created" represent the amount of wages, salaries, and net income of unincorporated businesses, and the number of jobs in terms of person/years created by the original spending. Independent workers are excluded.

To have a more complete picture of the economic impact of wildlife, a similar model should be applied to the expenditures made by the different levels of government in relation to the management of wildlife.

For purposes of the proposed economic report, similar estimates of economic impacts could be provided for various types of wildlife-related activities, for various industries involved, and for each province.

It should be noted that these economic impacts do not reflect those from the expenditures made by the non-resident wildlife users, and as a result are underestimated.

Value of wildlife (2)

IN THE NORTH

J. Cinq-Mars
Canadian Wildlife Service

At the June 1983 Federal Wildlife Conference in Edmonton, following a feasibility study prepared by Dr. Usher, which proposed to measure the commercial and subsistence values among native people and recreational wildlife values among non-native people of the Yukon and Northwest Territories, it was recommended that this examination be extended to measure those values in the northern parts of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, and Newfoundland. The funding for the subsequent feasibility study was provided by the benefiting provinces and territories, and the World Wildlife Fund. Dr. Usher then provided a report to the Wildlife Directors Committee at their meeting of September 1983. The report was entitled, "The use of official fur and game harvest statistics in evaluating the commercial and subsistence production of wildlife in northern Canada".

The major conclusions of the feasibility report were that:

(1) fur production records were adequate for estimating commercial values in all jurisdictions except Quebec, Newfoundland, and British Columbia;

(2) the game harvest records were inadequate to measure subsistence values and would require substantial additional work;

(3) the price of undertaking the study would range between $350 000 and $400 000.

Because of the complexity of the study, and the costs involved, it was decided that a second opinion would be sought from Dr. Harvey Feit, who had been involved in assessing similar values in James Bay and northern Quebec during the James Bay hydro-electric development. The purpose of Dr. Feit's involvement was to assess the potential and the usefulness of the resulting values, and the appropriateness of the approach and the concept; and to give to the Wildlife Directors a second opinion on the cost of the proposed study.

Dr. Feit's report was very supportive of Dr. Usher's approach. He suggested that measurement of non-monetary indicators of wildlife values should be included, and more detailed data on subsistence values obtained. Also, in order to optimize the political usefulness of this study, the project co-ordinator should seek native NGO involvement in the planning and development of the study. His last major comment referred to the cost, which was estimated at a minimum of $545 000.

The proposal

The proposed study would have a duration of about 3-5 years. Five provinces and two territories would be the beneficiaries. If all parties would agree to get involved in the study, Quebec, British Columbia, and Newfoundland should consider a cost in the magnitude of $78 500 each; Northwest Territories about $60 000 (part of the information being already available); Alberta, Saskatchewan,

Manitoba, and the Yukon approximately $73 500 each. The difference in cost between Quebec, British Columbia, and Newfoundland, and the other provinces is due to additional work needed in the fur-harvest reports.

The federal government, through CWS, would provide project management and technical expertise to oversee the project, which would amount to $30 000.

The recommendation that was submitted to this conference was that the benefiting provinces and territories seek funding authorization and inform CWS by 15 July as to their support and potential financial commitments. The level of funding received would enable the project co-ordinator to design the project accordingly. Funding would not be asked as one single commitment, but on a yearly basis to reduce cash outflow.

Value of wildlife (3)

SUMMARY OF DISCUSSION

M. Hummel (World Wildlife Fund Canada) said that he did not want to pre-empt comments by voting members, particularly in the Yukon and Northwest Territories, but WWF did participate financially in the feasibility study. He wanted to make a fall-back suggestion that, if there was a problem with rounding up somewhere between $350 000 and $545 000 for this survey, which he suspected there might be, it would at least be worth considering a scaled-down version. It seemed to him that, based on Peter Usher's report and other information that was available, quite a convincing and statistically sound case could be made for the importance of wildlife to the people "north of 60". He was not sure that $550 000 was necessary to prove the obvious, or that they needed a study comparable to the 1981 survey, but rather a study that was supplementary to the 1981 survey to make the case for "north of 60".

World Wildlife Fund Canada would be totally unable to participate in a study of the size and scope that had been discussed, he said, but if the jurisdictions involved could find the cash, then more power to them. If that was a problem, he would like to express an interest in something that was a little less ambitious from a statistical standpoint, but which still made the case by pulling together what was known, publishing it in an attractive fashion as a supplementary document to the 1981 survey, and translating it into whatever dialects seemed to be necessary for circulation in the North. He added that he did not mean to put this forward as an alternative, but was just saying that if there were problems with the rather ambitious proposal just described, he hoped that the important part of this project would not be entirely abandoned. WWF would be interested in seeing it go forward in some form, because they did feel that the supplementary information was very important.

J.D. Roseborough (Ontario Wildlife Branch) said that the jurisdictions had been put on record as confirming that they would respond by 15 July to CWS concerning their participation in the study of the value of wildlife in the North.

Update report

FORESTRY-WILDLIFE SYMPOSIUM (1)

T.C. Dauphiné
Canadian Wildlife Service

You will have heard talk, if you have attended any of the last four Federal-Provincial Wildlife Conferences, of a symposium on the integration of forestry and wildlife management. I would like to tell you about it, on behalf of the other members of the Steering Committee that organized the symposium: K. Armson, J.C. Baird, F. Bunnell, D. Euler, P. Gilbert, D.R. Halladay, W. Young, and D. Pollard.

The symposium was held at the University of British Columbia (UBC) on 7 to 10 May. It consisted of 2½ days of formal sessions, plus a banquet and 1- and 2-day field trips to see forestry and wildlife management areas in southern British Columbia. About 175 people attended, slightly over half of whom were from BC. The rest were from seven other provinces, four states, and one territory. The symposium organizers expected more people, but found governmental travel restrictions to be a major impediment. The economic slump in the forestry industry did not help attendance either. There was roughly equal attendance by foresters and biologists, the majority of whom were from governmental agencies. However, universities, forestry companies, and other NGOs (e.g. the Canadian Wildlife Federation, World Wildlife Fund, Canadian Nature Federation, Sierra Club, fish and game clubs) also participated.

Examined in perspective, the symposium was the first national gathering of foresters and biologists from government, industry, universities, and environmental groups in Canada. The mix of participants was remarkable, according to one reporter, who noted that many were individuals who often took opposite sides in debating environmental issues.

Closer integration

The theme of the symposium was to improve the integration of forestry and wildlife management. Accordingly, there were sessions on how laws and policies shape integration, how integration should work according to the view of the field practitioner, and how it has been discouraged by certain economic and social forces. A series of workshops dealt with the users of forest resources, such as trappers, hunters, and lumbermen; they identified the "products" they expected the forest manager to provide. Then four case studies of attempts at integrated management were described; namely, deer on Vancouver Island, moose in Ontario, grouse in the boreal forest, and eagles in the north-western USA.

Sessions were chaired by senior figures from both professions: Monte Hummel, World Wildlife Fund Canada; David Munro, latterly of IUCN; Al Brennan, Assistant Deputy Minister of Forestry, Alberta; and Gordon Baskerville, Dean of Forestry, University of New Brunswick. The symposium was summarized by a senior forester (Bill Young of the BC Ministry of Forests) and a senior wildlifer (Rich Goulden of the Manitoba Wildlife Branch). Ian McTaggart-Cowan presented a final overview.

The keynote speaker was John Livingston of York University who, in a reflective paper, traced the evolution of resource management in our culture, and urged closer integration of managers for the restraint--rather than the further imposition--of management technology. The banquet speaker was Jack Ward Thomas, who has led in the development of a sophisticated method to integrate forestry and wildlife management now used by the US Forest Service. He gave a talk that included a humorous description of ploys occasionally used by resource managers to circumvent the demands of competing interests.

The proceedings will be published in the "Forestry chronicle", a professional and technical forestry journal published by the Canadian Institute of Forestry. The "Chronicle" is received by over 2500 foresters in Canada and by over 400 libraries and universities in 60 countries. Publishing in that journal will put the results of the symposium before many of the forest managers and administrators in Canada. The proceedings should include 24 papers, which we plan to publish in a "dedicated" issue of the "Chronicle" next February. The cost of publication will be about $13 000, which will include 3000 reprints available for free distribution to symposium participants and anyone else who is interested. To finance this, the committee has grants of $5000 from the Canadian Forestry Service and $3500 from the Canadian Wildlife Service. The remainder will be obtained from the proceeds of the conference.

The symposium's organizing costs were very small, because the time and travel of organizing committee members were donated by their employing agencies and companies. The cost of advertising was also very small, because it was covered by the Canadian Wildlife Federation and, to a lesser extent, the Canadian Institute of Forestry and the Canadian Forestry Association. Costs of meeting facilities on the UBC campus were very low. As it turned out, the cost of speakers' travel was the single biggest item, but even that was held to a reasonable level because many speakers participated at their employer's cost. Gross revenue, largely derived from the registration fee of $50, amounted to about $21,600. Expenses will total about $15 400, leaving about $6000 for publication of the proceedings. Anthony Britneff of the BC Ministry of Forests deserves special recognition for skilful management of the symposium's finances.

Objectives assessed

The symposium had a mandate from the Federal-Provincial Wildlife Conference to improve integration; how well did it accomplish that? The organizing committee can only render partial judgement now, because obviously the full effect of the symposium will not be felt until after the proceedings are published. However, it is possible to make a preliminary assessment of the symposium's success in meeting three objectives identified by the Federal-Provincial Wildlife Conference.

The first objective was "to review existing policies and programs". The organizing committee believes that that objective was reasonably well met, as many papers addressed it specifically. In addition, there was considerable comment on the programs of various provinces, and British Columbia in particular.

The second objective was "to recommend improvements in the use of existing technology". The committee felt that the symposium did not satisfy this objective, because it put emphasis on the philosophy of management and not on

technology. Technology, therefore, remains an area to be addressed by another symposium.

The third objective was "to promote professional and public awareness of strengths and weaknesses of current systems of integration"; this was fully met for several reasons. All parties, foresters and wildlifers alike, saw the critical importance of personal attitude in determining the degree to which integration took place. Despite the existence of any number of policies and regulations, in the final analysis it was the attitudes of the people that determined if they were effectively implemented. Biologists, on their part, saw the vast size and complexity of the forest industry, and realized that the foresters had so many important problems to consider that they often had little time left to worry about wildlife. Some foresters saw ways to enhance the status of wildlife in forest management and made specific recommendations, including new government policies, more formal integration of the professions in agencies and universities, clearer definition of the "value" of wildlife, and legislative recognition of the "rights" of living things. Many of these recommendations were not new to the biologists, but they had not previously been heard from foresters. Both foresters and biologists saw that they shared many of the same problems like, for example, the loss of the same land base to marginal agriculture and urbanization.

Earlier, I mentioned the possibility of holding another symposium on the technology of managing forest wildlife. It could have sessions on current management practices, on recent studies and research, and perhaps on new developments in forestry technology that may affect wildlife. If the idea is attractive, I propose to the Wildlife Directors that perhaps representatives from three or four provinces, the federal government, and universities get together and come up with a concept to consider at this meeting next year. (Editor's note: A recommendation to hold a second symposium was subsequently accepted by the conference.)

In closing, I would like to acknowledge the participation of many people--by my count at least 25--who helped organize this symposium. I obviously cannot mention all of them. The forestry agencies of the Ontario, British Columbia, and federal governments were very supportive. The committee also received help from the Canadian Forestry Association and the Canadian Institute of Forestry. I would like to acknowledge all members of the organizing committee, and Ray Halladay, who took on the additional duty of chairing the British Columbia "host" committee, which skilfully made all local arrangements. Ed Telfer of CWS provided valuable advice and contacts. Lastly, I want to thank Ken Brynaert and the Canadian Wildlife Federation for financial support and for furnishing the advertising brochure for the symposium.

In conclusion, I will simply say that this symposium was a result of a major team effort in keeping with the theme of the present conference. I remind you all to look for the published proceedings next winter.

SUMMARY OF DISCUSSION

G. Sheehy (Canadian Nature Federation) said that the symposium seemed to have reinforced for him the view that they had a long way to go to integrate forestry and wildlife. The interesting report given, he believed, at the 44th Federal-Provincial Conference had talked about a task force to deal with on-going issues in forestry and wildlife, and to work towards that goal. It seemed to him that whether it was a task force or some sort of other working body, it would be a good idea to have some kind of an on-going effort to keep those two groups together and bring out some more of that knowledge and some of the good recommendations that could not come out of a 3-day conference. He asked what really had been the result of that original recommendation for a task force, and what other kinds of options they saw.

T.C. Dauphiné (Canadian Wildlife Service) replied that the task force was one option. They also had, as another option, the holding of the symposium. The two options had been examined, and it was decided that they would have the symposium rather than a task force. People seemed to be loth to establish any kind of a continuing commitment to a committee or task force. He still thought that, with interest from the various parties involved, something like that could work. However, his personal opinion was that probably symposia aimed at specific aspects of the overall problem were the best thing, because the whole idea really was to involve the foresters, to get them into it. They could decide things in their own group, but then they had to go out to a completely different group of professionals, much larger than they were, faced with many other more current, urgent problems that they were aware of perhaps, and try to sell that group on doing something for wildlife, or with them about wildlife. He thought this symposium was one way to marshal that attention from foresters.

J. Sloan (Ontario) said that, as they were well aware, Ontario did participate in the symposium and had found it to be extremely meaningful. However, Ontario felt that they were just starting to scratch the surface via the symposium, and that there should be future symposia. Ontario would be prepared to host a symposium in 1986, and he threw that out to the floor for consideration.

J.D. Roseborough (Ontario Wildlife Branch) suggested that, in view of the comment from Ontario, the task force should not be let off the hook, and that they should put together some recommendation for consideration by the Recommendations Committee. Once they had the impetus of bringing foresters and wildlife biologists together, he saw no reason why they should not maintain it. He wanted to be sure that this conference did not let it slide till next year. He asked if that was acceptable, and would they be sure to have a recommendation, depending upon the invitation of the Deputy Minister from Ontario or any other suggestions that might come to them.

(See Recommendation No. 15.)

Update report

FUR INSTITUTE OF CANADA (1)

R. Daniel
Executive Director

I know you are interested in what we have been doing, not the least because it is your money that we have been spending in the last 6 months. I have a comprehensive paper that will be circulated afterwards and, with that in mind, I will highlight many of the things that have happened.

The Fur Institute of Canada (FIC) has been in operation for 6 months and, rather than do things sequentially, we attempted to do a number of things in parallel. It was important that we establish a membership base for the Institute for political, funding, and other reasons.

We met with the constituent groups of the Institute to discuss its objectives, the policies and programs, the priorities as the Task Force saw them, and as the constituent groups saw them. I had meetings right across the country with the wildlife groups in each of the provinces. I visited every province and territory, except the Yukon. I met with most of the trappers' groups separately.

Then we had a series of conferences, first with the provincial fur managers, then the aboriginal groups, the trappers' associations, and the Fur Council of Canada at the International Fur Fair in Montreal. We generally got a strong message from each group that what we had conceived to be the priority, humane-trap research, was incorrect. They said public information was the highest priority, and that we should have been putting this emphasis on our activities. I will go into this again later, because I believe it was really just a perspective that the various groups had of our activities that was creating the problem, rather than the FIC's actual emphasis on priority.

While doing all these things, we commenced to negotiate with the Government of Alberta an agreement to conduct research at the Alberta Environmental Centre. We hope that it will be finalized within the next week or so.

Also, during the past 6 months we have established the key Institute committees of Humane Trap Research and Development, Public Information, and Trappers' Education, and have developed and approved terms of reference for these groups. We attempted to communicate with all of our members on a regular basis, because the main criticism that we had heard during our travels and meetings was the failure of those groups involved in past efforts to communicate effectively, whether it was the Federal-Provincial Committee on Humane Trapping or other groups in the industry. Criticism of the quality of communication, as a generality, is something that is hard to avoid, and it is often used as an excuse for other problems. We felt that the only way that we could solve the problem was to provide written information as regularly as we could to as many people as we could.

Continuing role

I will not go into the history of the FIC, because most of you here know it came from the Canada Fur Council and the Federal-Provincial Committee through the

Task Force, and now is the Fur Institute of Canada. There has been a long history of organizations that have attempted to bring some shape and definition to the various groups that are involved in the fur industry. We seem at this point in time to be having some success, but I think that is largely due to the present environment. If it was not for the series of crises that have occurred in the industry, I do not think that it would have gone quite as easily for us.

The position that we have taken is that we will continue the role of a number of other groups, particularly the Federal-Provincial Committee on Humane Trapping, in trap research. We are not starting something new. It is important that we present it that way. It is not a new endeavour, but rather the continuation of a lot of effort over a period of time with a fair degree of success. What we are doing is bringing that into focus; we are getting additional resources and hope that we can push it ahead even faster than before.

The crisis that we have had in the fur industry for the last 10 to 15 years has accelerated in recent times. It started with the Canadian Association of Humane Trapping and their movie in 1969 on animal welfare, moving to animal rights and animal liberation, the sealing ban, the threatened fish boycott, and now a threat against fur-ranching. All these things, I believe, have made it easier to bring a focus to what the Institute can do, and perhaps have been instrumental in bringing about the membership that we have today.

It might be useful for me to read the objects of the Institute and then relate those to later comments:

- to promote a standard of excellence in the conservation and optimum development of the fur resources of Canada;

- to carry on and promote development and implementation of the most humane possible means of harvesting and husbanding fur-bearing animals;

- to develop, compile, and distribute information relevant to Canada's fur industry that will improve the skills of those persons directly or indirectly involved in the primary fur industry;

- to promote an understanding of historical, current, and emerging issues important to the industry, government, and the public of Canada and abroad;

- to promote general interest in an understanding of fur-bearer management and utilization.

Emerging interests

It was evident from the beginning that there was an emphasis on the primary producer, and that primary producer was perceived to be the trapper. In recent weeks we have had unsolicited membership applications from the two national fur-ranching organizations--the mink-breeders and the fox-breeders--and two provincial organizations have joined. I have a feeling from talking to people that the ranching membership will continue to grow. It was not something we expected, and it was not something we would discourage. It was felt that the emphasis of the Institute for the first year or so would be on trapping through trap research, and that we would have little appeal to the ranchers.

Another surprise occurred at a meeting with Environment Canada about 6 weeks ago. I had expected their interests to be solely in humane-trap research and related activities. However, the first questions asked of me were: "How are you going to defend the markets overseas? How are we going to protect the livelihood of Canadians involved in the industry, and look after the people with the need for subsistence income and for protein in northern Canada?" That was a change in my understanding, and a positive one.

But the basic thrust of trap research is there. The Board of the Institute has decided it is equal to and equal with public information. We have one difficulty. The significant funds that have been earmarked are for trap research. So we have to find new money for the public information programs and other activities; but it is there, and what we have to do is develop the programs and develop the credibility as an organization to be responsible for those funds, and show that we can handle them effectively. The research is important, and the Institute has accepted this as more than a policy position, but as a statement of what they truly believe to be necessary, which is that the research is the credibility factor. Without humane research, we will not have an audience. Without an audience, there is no point in having public information programs. By that I mean that people, particularly in the European markets, will not be interested in our messages about northern life-styles and the right to survive, the economic value of the industry in Canada, and, if we can demonstrate it, that trapping is an integral part of sound wildlife management. These messages will only be heard against a visible background of humane-trap research and of the trappers' practices becoming more humane.

Membership

We now have 51 organizations as members. The Institute is an organization of organizations. We have no individuals as members. I think, with the exception of three or four corporate members, the balance of our membership are organizations such as provincial governments. We have two departments of the federal government--Indian Affairs and Northern Development, and Environment Canada; all 12 provinces and territories; all 13 trappers' associations; three aboriginal groups--the Native Council of Canada, the new organization called the Aboriginal Trappers' Federation of Canada, and the Yukon Council of Indians; nine groups from industry--Hudson's Bay, the Fur Council of Canada, the Retail Fur Council, Woodstream, etc.; six wildlife conservation groups; one humane society--the Canadian Association for Humane Trapping; and the four ranch groups that I have already mentioned. With that mix, we represent all of the segments of the fur industry.

If we have disappointments, it is with the aboriginal groups and with the commercial fur industry. We would like to see about 15 to 17 organizations from the commercial fur industry, including the unions and some of the smaller manufacturing organizations. We have established an informal committee at this stage of senior representatives of the private sector to explore this with us. The aboriginal situation is quite a different problem. The Inuit Tapirisat of Canada decided that they would work, at this time, through the Aboriginal Federation, and the Assembly of First Nations has a current agenda on which trapping issues and joining the Institute are not their highest priority, but they have made it clear that they wish to work with and through the Institute.

Committees

Within the FIC we have set up three committees, which are the workhorses of the Institute. We are a small staff--currently myself, an assistant, and a receptionist. We will stay that way, much like the institute we heard talked about this morning. If we need professional services, and we will, we will contract for them. The committees report to the Board and recommend to the Board, and it is my job to see that the committees carry out the instructions of the Board. The first to be established was the Humane Trap Research and Development Committee under Neal Jotham. That was relatively easy to get going because of the background of federal-provincial work, Neal's involvement in it, and the fact that many members of the committee were involved in the previous work. This is what gave rise to the visibility of the research project, and gave it an apparent priority over public information.

Public information got off to a false start. The Board felt that it really had not thought its way through the terms of reference, and decided that it wanted to do that itself before letting others go at it, so that the first Public Information Committee was closed down. We are in the process of restructuring the committee. The terms of reference have been developed and agreed to by the Board, and we will be approaching the whole question of the organization of public information in a somewhat different way. I believe that Rich Goulden described to you our proposal, still before the Board, to structure the work into three or four task groups.

We have an informal Industry Committee, which I hope will become a more formal committee over time, looking at membership from the private sector and examining the question of the financial commitment that the private sector could make to the Institute.

Approach to research

As I indicated under research, we are close to completing an agreement to carry out research at the Alberta Environmental Centre. The proposed approach to the work has changed from when the Task Force first thought of the research effort. Originally, it was thought that the approach would be similar to the federal-provincial committee's work--that is, contracting out research to various academic institutions, such as Guelph. For a number of reasons, we have found that it will be more effective for the Institute to employ directly a team of up to five individuals working full-time on trap research, augmented by the equivalent of 2 to 3 years from the Alberta Environmental Centre, providing a project management role and specialist resource roles.

We have to develop a first-year research plan by mid September, and we have to get the public information plan and organization in place. We have established a Trappers' Education Task Force, and they will be reporting by 1 October.

Funding for all of the activities under research is adequate and will allow us to run a 3- to 5-year program. We have to get the plan in place, and get the team hired, and that will be our effort over the next 6 or 8 weeks.

The funding for public information is not yet in place. We are developing proposals for discussion with groups in Ottawa, the provinces, and the private

sector. We anticipate, at first glance, a program of about $1 million over 3 years. All that has to be approved. The first thing we have to do is carry out some basic economic research on the structure of the industry, the value of the industry's contribution, and the contribution of the various sectors of the industry to that total package.

Board and Executive

I think I should cut this a little short by saying that many of the things we have been doing are somewhat mechanistic and administrative, and that is not where the future effort will be. On 25 June 1984, we will have a members' meeting at which we will elect for the first time a Board of 24 people. On the following day, that Board will elect the Executive Committee and we will have a full structure in place. Until we had that, we could not develop the philosophy or the long-range goals of the Institute, and that is why some of you, perhaps, have still some concern as to where we are going and what we are doing. We have a broad, multi-faceted organization. All the constituent groups have to feel a part of those objectives and those goals, and that will be the hard thrust in front of us.

The future focus of the Institute has to be on defending markets, communicating, and fighting to protect the industry. But our opposition has developed very carefully and very successfully a series of strategic plans that have worked well for them. We have to find our position, because they can articulate theirs very clearly in terms of their philosophy, and they often use untruths, misinformation, and incorrect information to make their point. But I think that if we are going to engage them, we want to know where we stand in relation to them. That is going to be a hard dialogue within the Institute, and we hope to get, if not 100% agreement, a strong consensus within all the groups as to the direction in which we will travel in the next couple of years.

Fur Institute of Canada (2)

SUMMARY OF DISCUSSION

J.D. Roseborough (Ontario Wildlife Branch) said that he thought the update report had been a very fine capsule of the work of the Institute since 1 December, and perhaps previous to that. During the past little while, the bringing in of trappers and aboriginal people, and also fur managers from the provinces, had helped them all to understand the objectives of the Institute and where they were going.

K.A. Brynaert (Canadian Wildlife Federation) said he had paid particular attention to Ron Daniel's comments regarding the "anti" groups. In the Canadian Wildlife Federation, they had come to the conclusion that every time they used words like "anti-sealing", "anti-hunting", and "anti-trapping" they were, to some people, giving credence to those groups. People did support some of the principles that those people espoused. The CWF believed that by definition all those groups could be categorized as the anti-conservationist movement. If one only used the "World conservationist strategy" principle No. 3, which concurred with the wise use of natural resources, anyone who advocated anything less than that was by that definition, in CWF's view, an anti-conservationist; the point being that "anti-conservation" was negative. It was negative in everyone's mind, and the CWF encouraged people to use the term. He said that he had had correspondence from the United States, where it was used. It was just one more way that they could counter this problem.

R. Daniel (Fur Institute of Canada) replied that he agreed with Ken Brynaert that the whole area was fraught with semantics, and finding a good word like "anti-conversation" was an important step.

Update report

WILDLIFE HABITAT CANADA

D.J. Neave

Before making a few comments on the status of this new Foundation, I would like to thank all the provincial/territorial and federal Wildlife Directors and their staffs, along with many NGO representatives, for their advice and support in the development of Wildlife Habitat Canada. I can assure you that it has made my job a lot easier and the results more substantial.

Since the announcement of the creation of the Foundation by the federal Minister of Environment, on 20 February 1984, the following developments have occurred:

(1) The application for a charter and the by-laws were prepared and submitted by a Founding Committee. The Foundation received its charter, becoming legally incorporated on 24 February 1984.

(2) A Nominating Committee of the Founding Committee finalized the Board of Directors. In a few moments, I will ask Jim Patterson, Chairman of this committee, to report on the status of these appointments to the Board, which represents -

- federal interests,

- provincial interests,

- non-governmental wildlife interests.

Two other directors representing, it is hoped, other resource sectors, will be determined at the first Board meeting, which is anticipated in July.

(3) The federal government provided a $1 million start-up grant in 1983-84, and is providing an additional $2 million in 1984-85. It has also committed the funds obtained from the habitat stamp associated with the 'Migratory game bird hunting permit" in 1985-86 to the Foundation, which will initially provide approximately $2 million in annual revenue.

(4) A proposal for the Board's consideration has been developed, more definitively outlining the objectives of the Foundation, an operating policy, and a program for 1984-85, with a budget. While it is premature to discuss this proposal, because it is for the board's consideration, I have a few copies for distribution of the background material regarding the Foundation that outlines the mandate and objectives, dealing with a catalyst, banker, and watchdog role.

Those are the four highlights. I have also prepared a review of habitat programs in Canada relative to issues and opportunities, as a backgrounder in determining a niche for Wildlife Habitat Canada. I am optimistic that this Foundation can live up to the very varied expectations of many individuals--in helping to foster co-operative habitat programs under more comprehensive habitat strategies. I can assure you that there is no shortage of ideas.

Again, I would like to compliment the many individuals here who have participated in the development of the Foundation, and most recently in the development of specific habitat endeavours for this year. In this regard, I have met with most of you and/or your staffs since the initial announcement in February, and look forward to meetings this summer regarding specific habitat projects of a co-operative nature. I would now like to ask Dr. J. Patterson to elaborate on the composition of the Board of Directors.

Appointments to Board of Directors

Dr. J. Patterson
Canadian Wildlife Service

As Dave Neave has mentioned, the Board of the Wildlife Habitat Canada Foundation will be comprised of nine people. Three will be nominated by the Minister of the Environment, two will be nominated to represent the non-governmental environmental organizations, and there will be two provincial representatives. The two members at large, we anticipate, will be a link between habitat interests and industrial interests such as agriculture, forestry, etc.

Environment Canada's three nominees and the NGO representatives will be announced as soon as possible. I think that it is very fitting for this conference to identify the people who will be representing the provinces and territories on the initial Board of Directors. It gives me pleasure to recognize Arthur Smith from Prince Edward Island, who will be representing the eastern provinces, and Rich Goulden of Manitoba, who will be representing the western provinces and territories.

Report (program highlights)

ALBERTA FISH AND WILDLIFE DIVISION

Wildlife Act

The rewrite of the Wildlife Act is into its final stages and is slated to go before the legislature during the fall session.

Waterfowl depredation and compensation

Two 5-year, cost-share agreements with the federal government were signed (early in 1984) to cover the period April 1983 through March 1988. One agreement, which allows for payment of compensation to farmers for crop losses, has increased the maximum payment for losses to $65/acre from $50/acre. The damage-prevention agreement, which provides for the operation of lure sites (bait stations and lure crops) and scaring assistance to farmers, will facilitate both annual and long-term planning.

CWS accord

Preliminary discussions have dealt with minimizing the duplication of effort in some aspects of migratory bird management by both the federal and provincial wildlife agencies. Clarification of the roles and responsibilities of each of the two levels of government will lead to increased efficiency in planning and management by both agencies.

"Wetlands for tomorrow"

Several of the 20 key wetlands identified in the agreement with Ducks Unlimited (Canada) are currently being developed. There are five wetland areas in the advanced planning stages and two are in the implementation stage, with Tyrrell-Rush Lakes being developed and a portion of the land acquisition completed at Kleskun.

Fur Institute of Canada

Alberta Fish and Wildlife is finalizing arrangements with Alberta Environment for the housing of the Fur Institute in the Alberta Environment Centre at Vegreville.

Game farming

A policy paper, dealing with ways and means of retaining wildlife in captivity, is being developed. The paper will address various kinds of facilities for keeping wildlife in captivity, such as public zoos, private zoos, educational and research facilities, and big-game farms.

Major changes are being considered in the big-game farming legislation dealing with the sale of products of game-farm animals, including the sale of meat. This legislation is only in the preliminary draft stages, with no implementation being considered until public input has been considered.

Wood Buffalo re-introduction

Alberta Fish and Wildlife is jointly involved with CWS in a program to re-introduce the wood buffalo to their former range in the Hay-Zama area. The buffalo will be held at the release site for 1 to 2 years before releasing. This strategy is being applied in an attempt to reduce migration out of the release area.

Report (program highlights)

BRITISH COLUMBIA FISH AND WILDLIFE BRANCH

While public controversy over British Columbia's wolf-control program tended to overshadow other activities of the province's Fish and Wildlife Branch, the agency was active in the conservation and protection of our wildlife in many other areas. A few items considered to be of positive or passing interest to our colleagues across Canada are briefly described in the notes following.

Biometrics

"Limited-entry" system streamlined

The computer system for processing and drawing "Limited-entry hunting" applications was greatly streamlined for the 1984 hunting season. In the past, applicants were required to enter a number of separate codes for hunt area, data, and animal type (i.e. "adult bull", "calf only", etc.). This system resulted in a high (10-12%) error rate due to hunters wrongly coding their applications. Additionally, hunters had to buy a colour-coded application form specific to the species they intended to hunt. This created distribution problems and required the printing of eight separate types of applications.

Under the new system, all aspects of a given hunt, including the species, are defined by a single 4-digit code. The error rate has dropped to 1%, and the application forms are now generic. Great savings in time and cost have resulted. Approximately 50 000 applications are expected for this year's draw.

Hunter's number

In 1981, a system was implemented which assigned a unique ID number to each hunter. Early problems have been solved and the system now runs smoothly. It provides a readily maintainable mailing list, enforcement information, a record of tag and licence purchases, and other important data. Additionally, the system has allowed us to easily merge data from all our computer-based files. Programming is now in progress to produce regular integrated reports from all our data systems. Such reports would not have been possible without the hunters' ID file.

Coastal grizzly study

In April 1982, a research project on coastal grizzly bears was initiated. This project is co-operatively funded by the ministries of Environment and Forests, with additional support from the University of British Columbia, the forest industry, and the Canadian Wildlife Federation. Its objectives are to determine seasonal habitat-use patterns, assess the impacts of logging in coastal forests on grizzlies, and address population-related questions.

Two field seasons of pre-logging observation have resulted in the first objective being achieved. Logging is currently underway in the study area and the effects

of this disturbance on grizzlies is being monitored. Treatments will be introduced this season to test the importance of old-growth and security cover to coastal grizzlies. Field work is planned to continue for an additional 2 years. Results from this project will allow forest and wildlife managers to identify the cost relationship of grizzlies to various logging scenarios in coastal forests.

Licence fee increases

During the past 10 years, there have been two fee increases affecting all hunting and freshwater angling licences in British Columbia. In addition, a surcharge of $3.00 was placed on all basic hunting and fishing licences, the revenue from that source going directly into the Habitat Conservation Fund.

The higher fees resulted in an immediate decrease in the number of licences sold, but considerably augmented revenues. In the case of the earlier increases, hunters' and anglers' numbers had returned to normal over a period of 2 or 3 years, but the most recent change, in 1982, doubled most fees and it is anticipated that recovery will be more protracted, particularly in view of the current economic climate.

Table 1. BC hunting and sport fishing licence sales, 1981 and 1982

Type of licence	1981		1982	
	No.	Revenue	No.	Revenue
Resident hunting	174 088	$2 774 141	154 102	$4 729 839
Non-resident hunting	5 065	1 246 294	4 305	1 292 583
Resident angling	365 503	1 775 986	315 378	2 746 356
Non-resident angling	113 818	868 414	85 005	1 083 032

Licence sales numbers and revenue for 1981 and 1982 fiscal years are shown in Table 1. Final returns from the 1983 licence year, ended 31 March 1984, are not yet available, but are expected to match 1982 figures.

Threatened and endangered species

Burrowing Owl

The Burrowing Owl (Athene cunicularia) was nearly extirpated as a breeding species in British Columbia during the 1970s. It was officially designated as an endangered species in the province in March 1980. As part of a recovery plan, 17 Burrowing Owls were reintroduced to two sites in 1983. A pair of owls with their nine unfledged young were brought in from Washington and released in the south Okanagan. Seven 1-year-old, captive-bred birds were provided by the Owl Rehabilitation Research Foundation in Ontario and were released near Douglas Lake. Artificial burrows, temporary cages, and food were provided at both sites.

At the Okanagan site, the adults successfully fledged most of the young, which dispersed shortly after fledging. No birds were known to return to the Okanagan to nest in 1984. About 30 birds will be introduced in 1984. At the Douglas Lake site, no owls nested, but two stayed around until later summer. We believe cages were removed too early. In 1984 we plan to hold the birds in pens for a much longer period.

Vancouver Island marmot

Intensive surveys in 1982 and 1983 to determine areas used by marmots showed that at least three distinct populations exist, consisting of 13 colonies. Six other individual colonies were documented. In addition, 21 other areas showed active use by marmots, but did not meet the criteria for viable colonies. A total of 165 marmots were seen in 1983. The aim of the surveys was to document areas of use, rather than to determine population figures. In 1984, we will again inventory new areas for the presence or absence of marmots, but we will also concentrate on obtaining good population counts in areas known to be occupied by them.

Hunter/non-hunter-demand surveys

Preliminary analysis of the hunter-demand survey began in 1983. The objectives of this survey were to obtain preferences, activity rates, costs, and values associated with hunting in BC. A non-hunting users' survey was initiated in 1983 to obtain comparable data. Some questions paralleled the national survey, enabling us to draw direct comparisons. Results of both surveys will be available in 1984.

Wolf management

Status

Wolves have recovered moderate to high densities in over 80% of their historic range in British Columbia. Low populations and population expansions are evident in the remaining southern mainland areas, except in areas of intensive human use.

Conflicts with agriculture

Approximately 120 wolves involved in livestock conflicts were removed in 1983 through the site-specific, reactive use of single lethal-dose 1080 baits, or by trapping and shooting. Illegal poison baiting is suspected in some livestock areas where co-operation with ranchers ceased during a moratorium on the government baiting program in 1979.

Wolf control to benefit wildlife

Wolf management in BC is in strict conformity with our long-term management objectives to maintain viable wolf and wild-ungulate populations. Control is

practiced only in situations of severe ungulate declines, or where habitat capability for ungulates cannot be realized due to unusually high wolf populations.

(1) Northern Vancouver Island: Nimpkish Valley
Wolves have been controlled through shooting and trapping for three consecutive winters to test the viability of a time-limited, site-specific control program as a means of arresting and reversing a severe deer decline (ca. 75%), and to test control methods. Currently a decline in the wolf population is evident, in correlation with increased survival of fawns.

(2) Kechika project (northeastern BC)
Wolves have been controlled for three consecutive winters through helicopter hunting by government staff. The purpose is to test the viability of control as a means of arresting and reversing moose and mountain sheep population declines and enhancing elk populations. Currently there is approximately a tenfold difference in moose-calf winter carryover rates between the wolf-removal and test-control (non-removal) areas. A similar positive response is evident in sheep populations.

(3) Muskwa project (northeastern BC)
An operational wolf-control program was implemented in the Muskwa area, using the same approach as in the Kechika area, to enhance declining moose and low elk populations. Wolf densities had been constantly increasing, locally reaching density levels of one wolf/25km^2. In both NE project areas, restrictions on the hunting of ungulates have been introduced, including guide quotas and elimination of open seasons for calves and cows.

Habitat Conservation Fund

British Columbia's Habitat Conservation Fund was established by amendment to the Wildlife Act in 1980 to finance the enhancement and acquisition of critical habitat for fish and wildlife conservation. Revenue for enhancement projects comes from a $3.00 surcharge placed on all hunting, angling, guiding, and trapping licences. Donations and bequests are also accepted. Since 1981, approximately $3.5 million have been spent on projects throughout the province.

An estimated 8% of this budget has been spent on projects to promote and stimulate interest in the fund; 43% on fisheries projects, such as stream clearance to increase access to spawning and rearing habitat, spawning-ground improvements to increase population recruitment, lake aeration to provide viable year-round habitat for sports fish, chemical rehabilitation of lakes infested with coarse-fish species, and development of artificial spawning channels to promote naturalized sports-fish populations; and 49% spent on wildlife projects using enhancement techniques such as prescribed burning to rejuvenate wild-ungulate winter range, mechanical thinning and planting of preferred species to improve browse conditions, wetland improvements for waterfowl and upland birds, and reintroduction of species such as elk, mountain goat, and Burrowing Owl to historic ranges.

Approximately 90 projects are submitted each year for review by the Fish and Wildlife Technical Advisors and the Public Advisory Board.

Revenue for the acquisition of critical habitat areas comes from a grant from the Crown land account. Each property approved for purchase undergoes often lengthy negotiations with interested landowners. To date, $1 million has been spent on the acquisition of five properties, totalling 700 ha of habitat for fish and wildlife.

A third account was established in 1983 to accept "Compensation donations" from corporations or individuals interested in financing enhancement or acquisition opportunities to replace wildlife values lost through industrial development. To date, $250 000 in contributions has been received from Cominco Copper Ltd. Discussions for developing an enhancement strategy near the mine site are underway.

Report (program highlights)

MANITOBA WILDLIFE BRANCH

In the age of shrinking budgets and restricted manpower, co-operation and teamwork have become essential ingredients of good wildlife management. In this regard, Manitoba has been fortunate to have the opportunity to work closely with governmental agencies and private organizations and groups to achieve a measure of success in a number of endeavours. Without the spirit of co-operation that exists, worthy projects such as a wood-bison transplant, wildlife interpretative developments, and critical habitat acquisitions would all have fallen by the wayside.

Wildlife extension

Manitoba's National Wildlife Week program continued to mushroom as new features were added and new initiatives launched in an effort to increase public awareness of wildlife. The "Wetland wildlife" theme adopted this year was the focal point of a host of National Wildlife Week activities, including a poster, prose, and doodle-poster contest, a wildlife conservation youth project competition, mall displays, a film and speaker program, and production of a wetland wildlife colouring and activity book.

This was the most successful of all our previous National Wildlife Weeks, thanks to the enthusiasm and active participation in all phases of the program by Ducks Unlimited Canada, Canadian Wildlife Service, Manitoba Wildlife Federation, Manitoba Naturalists' Society, Manitoba Forestry Association, Fort Whyte Centre for Environmental Education, City of Winnipeg, Brandon Natural History Society, Wildlife Branch, Polo Park Shopping Centre, and the Manitoba Museum of Man and Nature.

In 1983, the Wildlife Branch and CWS embarked on a co-operative nature interpretation program at Oak Hammock Marsh Wildlife Management Area. CWS provided the impetus for such a program by assigning a nature interpretation biologist to the area on a trial basis. Under the new program, staff produced the inaugural issue of a newsletter and laid the groundwork for a comprehensive nature interpretation program. Over 40 000 people visited the area in 1983; 3000 visitors were taken on guided tours and 4000 were contacted by roving naturalists. That same year, the program received a $133 000 Department of Tourism grant to develop tourist-related facilities within the area. Developments will include a visitors' reception centre, a loop nature-dike, and promotional materials.

Special efforts were made to present the "5-year report to the Legislature on wildlife" to interest groups, with explanations of wildlife concerns, predictions, and trends. Most notably, efforts were made to explain and qualify information on wildlife harvest concerns to Treaty Indian bands and tribal councils. In addition the Minister of Natural Resources embarked on a series of "Dialogues on wildlife" in various centres across Manitoba. Individuals and organizations were invited to express their views and receive departmental response on many wildlife issues.

Three branches of the department--the Wildlife Branch, Regional Services Branch, and Economics and Review Branch--co-operated to undertake a survey of landowners in the province in an effort to determine their views and recommendations regarding hunters' behaviour, hunting laws, and hunting-law enforcement. The landowners' response rate to the survey was over 33%, and the information received provided valuable insight into their concerns. A steering committee will be formed to address the concerns expressed in the survey, and a working group will be established to carry on program development.

Hunting programs

A senior citizens' moose hunt, the first of its kind in Manitoba, was held in the winter of 1983. Eighty residents over 65 years of age were given the opportunity to bag a bull or calf moose on Hecla Island in Lake Winnipeg. The licences were issued on a "two hunters to one tag" basis, and all successful applicants were invited to attend a pre-hunt briefing and moose biology session put on by the branch. Though only one moose was taken during the 1-week season, the majority of hunters remained optimistic and enthusiastic throughout, making the hunt an unqualified public relations success. As a result of this success, the seniors' hunt will continue in 1984.

Fur management

The Tramping Lake Field Station, located approximately 80 miles northeast of The Pas in northern Manitoba, was completed and made fully operational in 1983-84. At the facility, Wildlife Branch staff field-tested trapping devices certified as humane by the Federal-Provincial Committee for Humane Trapping, and held trapping education and staff training sessions. In addition, the station was used as a meeting facility for Natural Resources personnel and the Manitoba Registered Trappers' Association.

Fur specialists continued to provide expert assistance in planning and implementing trapping programs in areas of Manitoba covered by the Northern Flood Agreement, a resource development agreement entered into by Canada, Manitoba, Manitoba Hydro, and five native communities.

Waterfowl management

Manitoba has formulated its waterfowl action plan as part of a national scheme to provide long-term direction and guidance in waterfowl management. The goals and objectives of Manitoba's waterfowl managers have been identified and organized in the Manitoba plan according to waterfowl population, wetland habitat, and socio-economic considerations. The Wildlife Branch took the lead role in drafting the plan, with CWS providing input.

Waterfowl managers and specialists also conducted public meetings and circulated questionnaires to assess public views regarding non-resident waterfowl hunting, morning-only goose hunting, and other relevant issues.

Wildlife damage control

Manitoba and Canada have entered into a 5-year Waterfowl Damage Prevention Agreement. Under the terms of the agreement, costs of waterfowl damage prevention will be shared equally by the province and Canada as before, but the new long-term nature of the agreement will also allow for much-needed, long-term program planning, program assessment, and technical studies to develop more effective prevention methods and procedures.

Staff also completed work on a comprehensive wolf-control policy. Program efforts must follow the stringent criteria outlined in the policy to ensure consistent and professional action in dealing with problem wolves, and to assure that wolves are not unduly harassed or killed.

Habitat management

A significant advance in the quest to maintain wildlife habitat in Manitoba came in the announcement of the 'Manitoba habitat heritage program", with $1.5 million earmarked for a variety of initiatives that will maintain and enhance wildlife and fish habitat in the province over the next 4 years. A public advisory board consisting of representatives of academic groups, naturalists, hunters, landowners, and fishermen will be appointed by the Minister of Natural Resources to review and recommend habitat enhancement projects that will be undertaken by the Wildlife and Fisheries Branches. The board will meet four times annually to carry out their duties, at which time the public will also be encouraged to provide input and submit proposals.

Securing the land-base for wildlife continued to receive priority attention within the branch in 1983. Negotiations to secure tracts of private and Crown land continued, as 1300 ha were earmarked for designation as Wildlife Management Areas (WMAs), largely due to co-operative efforts of local game and fish associations and the department. In 1984, WMAs, Crown lands reserved for the conservation and management of wildlife and their habitat, totalled 3 million ha, roughly 5.5% of the province's land area. Another mechanism to acquire wildlife lands has surfaced in a highly successful wildlife lands bequeathment program. The first of these private lands donated to the province for wildlife use was a 65-ha parcel in southwestern Manitoba, now designated the John McPhail Wildlife Refuge in honour of the donor's father. A 32-ha parcel, to be designated the Harry Cox Wildlife Refuge, has also been acquired and awaits formal designation.

A system whereby the province will pay annual grants to local governments for wildlife land within their jurisdictions in lieu of taxes was finalized, facilitating future acquisition of wildlife lands by the province. Historically, as lands were converted from agricultural use to wildlife use, local governments lost revenue in the form of agricultural lease payments and, to offset this loss, levied taxes upon the province. However, the paying of taxes by the province was incongruous with government philosophies; therefore, to resolve the situation, the province will pay approximately $180 000 in annual grants to local governments in lieu of taxes, commencing 1 January 1985.

Manitoba again directed considerable resources towards habitat inventory, completing, through analysis of Landsat digital satellite data, 20 of 49 maps required to quantify moose habitat in the 152 000-km^2 Northern Flood Agreement

Area. The maps and associated tabulations were used as reference standards to successfully conduct an aerial moose survey for the Cross Lake and Norway House registered trapline districts of the Northern Flood Agreement Area. A deer habitat inventory was also initiated in the southern portion of the province, using Landsat data to inventory tree and shrub cover over Manitoba's white-tailed deer range (approximately 100 000 km^2).

Biological services

In 1983-84, the Wildlife Branch co-operated with the World Wildlife Fund Canada to support studies of rare and endangered species in Manitoba. Studies were undertaken to determine the status and distribution of the province's Burrowing Owl, cougar, western hognose snake, White Pelican, and Great Gray Owl populations.

The department also entered into a 3-year agreement with the US Fish and Wildlife Service to conduct nesting surveys of eagles in Manitoba. In return for their survey efforts, the US agency will receive six or more Manitoba eaglets for eventual release in Massachusetts and New Jersey as part of restocking programs being carried out in those states.

Hacking of young Peregrine Falcons in the Winnipeg area continued for the third year. Three falcons were released in early August from a building on the University of Manitoba campus. Considerable public interest and support for this program has been generated since its inception in 1981.

A study into the feasibility of reintroducing the swift fox into southwestern Manitoba was completed in 1983. Survey results indicate potential for successful reintroductions in two locations. Foxes will be obtained from CWS for release as part of a 5-year agreement between the province and Canada.

A special effort was made to locate historical records of wildlife in various local periodicals dating back to the late 1800s. Over 2500 records of wildlife contained in nine local newspapers printed in southwestern Manitoba between 1880 and 1950 have been catalogued. The information will be analysed to determine long-term trends in wildlife populations in Manitoba where no scientific data are available.

Waterfowl banding continued in southern Manitoba with over 14 000 ducks being banded by the Wildlife Branch in co-operation with CWS at four major banding stations across the province.

The Wildlife Branch is co-operating with CWS and the Northwest Territories Department of Renewable Resources to conduct studies of polar-bear reproductive biology, denning behaviour, garbage-dump behaviour, and damage prevention in the Churchill area throughout the year. Results of this work have directly supported the on-going polar bear management in the area.

Report (program highlights)

NORTHWEST TERRITORIES DEPARTMENT OF RENEWABLE RESOURCES

The challenge of managing renewable-resource use in the Northwest Territories is unique. This is in part due to the vast size of the territory and its large number of high-profile species. However, the major challenge revolves around responsibly managing resources in an area where residents are still directly dependent upon those resources for their livelihood.

Although the direct relationship presents a management challenge, it also provides opportunities for co-operative management, since such close dependence inevitably encourages good stewardship. With that in mind, in the past year the department has placed additional emphasis on involving resource-users in the management of wildlife.

Public involvement

The primary vehicle enabling formal public involvement in the determination and direction of departmental programs has been the development and public review of a draft "Strategic plan". With the goal of enabling the department to facilitate the proper balance between renewable and non-renewable resource development options in the face of changing resource-use patterns, the plan has been the subject of extensive consultation with community and regional Hunters' and Trappers' Associations, as well as other public interest groups. On the basis of that public input, the "Strategic plan", which will provide direction for the department for the next several years, is currently being revised and will be available for distribution in the near future.

In its on-going programs, the department has taken a number of significant steps. A major achievement has been the establishment of a Northwest Territories Hunters' and Trappers' Federation to provide centralized representation for each of the community-based Hunters' and Trappers' Associations. That group has already played a significant role in support of the Fur Institute, and has investigated several areas of interest to its members, such as taxation problems and resource development assistance programs. In addition, it has reviewed proposed legislation, policies, and programs that would affect hunters and trappers.

The Beverly Kaminuriak Caribou Management Board provides a good example of the involvement of resource-users in high-profile management issues. The board, established in co-operation with several governments as well as traditional users, continues to deal with the difficult problems of long-term management, while at the same time effecting changes to short-term government policies or legislation that it views as being necessary. Perhaps most important, the Board has assumed a great deal of responsibility in the area of public education, both with the current and the next generation of hunters.

The provision of reliable harvest statistics has always been a major problem for wildlife managers. For several years this necessary information has been obtained for part of the Northwest Territories through contractual arrangements with native and regional wildlife organizations, specifically the Baffin Region

Inuit Association and the Keewatin Wildlife Federation. During the past year, that process and the information it has produced have been assessed by the agencies involved, in conjunction with the native organizations and with the assistance of Dr. Peter Usher. The resulting recommendations call for continuance of the programs with only minor modifications, as well as the implementation of similar co-operative harvest studies that rely upon users' organizations for data collection in those regions not presently covered.

Species management plans are seen as being an essential tool in the management of wildlife populations in the Northwest Territories. They serve to amalgamate current knowledge, ensure a co-ordinated approach to increase our level of understanding about the species, and prescribe management techniques that will best meet the agreed goals and objectives. Most important, the plans enable, and indeed encourage, community input through a public consultation process that ensures that their final form will have broad public support. The department is currently in the midst of such public consultation with its first draft of the "Mackenzie wood bison management plan". A similar process will soon be underway to obtain public response to our draft "Northwest Territories waterfowl action plan".

Although, wherever possible, the department has involved users in wildlife studies and surveys, the lead role for such work has always rested with the department. However, this spring in a program funded through an Economic Development Agreement, the department is assisting the Baffin Regional Council in the design and implementation of a raptor-nest survey in the vicinity of several Baffin communities. This multi-year program will capitalize on the familiarity of local residents with their traditional hunting areas, and will ultimately result in the provision of data well in advance of the department being able to acquire them on its own.

Wildlife management studies

Major field studies of caribou in the past year have focused on the Bluenose and Kaminuriak herds. Both visual surveys and aerial photography techniques were used to estimate the number of breeding females on the calving grounds. The Kaminuriak survey confirmed the 1982 estimate that indicated a substantial increase from earlier years. The aerial photography results, when analysed along with results from similar surveys over the past several years, showed that observers failed to count substantial numbers of caribou. However, that bias does not affect our conclusions about the trend in the size of herds.

The polar-bear project's major thrust continues to be the population study along the northeast coast of Baffin Island, although we do plan to begin a major study in Foxe Basin this fall. Along with CWS and the US Fish and Wildlife Service, we are involved in a radio-tracking study in the Beaufort Sea in an effort to determine how the bear population in that area is shared between Canada and the United States, as well as to determine how they den and how they use different ice types. This information will be useful in mitigating the impacts of Beaufort Sea industrial development, as well as for managing that population. Finally, in co-operation with CWS, we are collecting tissue samples in the western half of the Northwest Territories to analyse for heavy metals and organochlorides. These samples will provide us with a baseline against which to measure changes in environmental quality.

Our raptor program continued to concentrate on Gyrfalcons, with the establishment of a study area in the central Arctic, where breeding populations and prey types and abundance were determined. Production and banding surveys were conducted in both the Kitikmeot and Baffin regions during the summer, and the banding of passage birds was conducted this fall. Two community Hunters' and Trappers' Associations received permits to capture a total of 12 Gyrfalcons. Two white-phase birds were trapped in late September in Spence Bay, and CITES permits were issued for their export. Other capture attempts were unsuccessful.

Conservation education

One of the highlights of the year has been the enthusiastic involvement of schoolchildren across the North in activities associated with National Wildlife Week, particularly the poster contest. This year, 1800 entries were submitted and three students received awards at the national level.

Over the year, materials describing departmental activities have been produced, using a variety of media, in most native languages. The department has also provided assistance to the Beverly Kaminuriak board in the production of its schools' program--a five-unit, self-contained program designed for use in both elementary and junior high schools. Although originally intended for use in communities on the range of those herds, it is likely to come into wide use across the North.

Resource development

Finally, the department has reorganized both its field and headquarters staff in order to assist resource-users in developing the renewable resource economy. This major thrust, which capitalizes on a Regional Economic Development Agreement, is aimed at developing those renewable resource-based economic opportunities that have the potential for providing a long-term economic base for northern communities. Projects are being developed with community Hunters' and Trappers' Associations, as well as individuals and regional groups.

Report (program highlights)

NOVA SCOTIA DEPARTMENT OF LANDS AND FORESTS

Fur-bearers

Nova Scotia now has qualified trapper-instructors prepared to conduct trappers' educational courses. A program is currently being developed for first-time trappers that will soon be a prerequisite to obtaining a fur-bearer licence. The course will emphasize trappers' ethics, humane trapping, and the basics of fur-bearer management from the point of view of the trappers' responsibilities.

Rapid expansion of coyote populations in Nova Scotia since the first one was identified in 1977 has been closely monitored. Coyotes now occur throughout the province. Coyote sheep-killing behaviour has become a particular problem in the eastern mainland part of the province. A damage-control program has been implemented to assist sheep-growers with coyote problems.

Non-game

Studies of Bald Eagles, including their nest sites, productivity, wintering areas, and movements have permitted estimates of the breeding population and annual production of young birds, and provided information on eagle movements and important wintering sites in the province. Based on these studies, which indicate a stable and reasonably productive breeding population, 10 nestling eagles have been donated to the United States for eventual release in New Jersey and Massachusetts.

An Osprey relocation project, undertaken in 1979-80, was successful in reducing the numbers of these breeding birds on power-line poles without significantly reducing nest success. The techniques are now being used elsewhere in the province.

Another recent achievement has been the completion of a province-wide census of Great and Double-crested Cormorants. The results showed a substantial increase in both species. A concurrent food-habits study indicates that cormorants feed primarily on economically unimportant marine and freshwater fish.

Wetlands

The province currently owns and administers about 4860 ha of wetland wildlife habitat that has been developed through the co-operation of Ducks Unlimited.

Planning maps have been developed for important freshwater wetlands and coastal wildlife habitats. A "Wetlands atlas for Nova Scotia" was produced in 1983 in co-operation with CWS.

Wood Duck and Canada Goose breeding propulations have been successfully established on Cape Breton Island.

About 50 Crown-owned islands have been designated for wildlife management. These units maintain about 40% of the NS population of breeding eiders, and sustain populations of several other colonial bird-nesters.

Evaluation of brood-habitat data has resulted in the development of some preliminary Black Duck habitat predictive models.

Big game

Studies on black bear suggest a population decline, low reproduction, and heavy harvest. Methods to control harvests in an effort to ensure population maintenance will be considered. About 425 black bear were harvested in 1983.

A series of mild winters, combined with changing forest management practices, has resulted in a substantial increase in the deer population. This has led to reduced physical condition of the herd, suggesting the potential for severe overpopulation problems for any normal winter conditions restricting mobility. Measures are being considered to permit increased hunting opportunities and, it is hoped, increase the harvest of deer to reduce the potential for severe habitat deterioration and population crash. About 44 500 deer were harvested in 1983.

Hunters' safety program

In 1981, the hunters' safety program was revised, making it mandatory for all persons who did not hold a "Firearm hunting certificate" to complete the program. To 31 December 1983, 31 507 persons had successfully completed the 7-hour course.

Bow-hunters are required to complete the course, and 1306 have participated to date.

Guide licensing system

A new guide licensing system was implemented in 1984 for the purpose of up-grading the services available to visiting hunters and anglers. The new regulations stipulate the type of licences available, skill requirements, and testing procedures.

The classification system comprises five categories of guide licenses: fishing, hunting, recreational, master, and special permit. Guide examination boards have been established to administer all testing of applicants and make recommendations to the department.

Enforcement

About 450 convictions were recorded under the Lands and Forests Act, Part III Wildlife, during 1983-84.

Licence sales (1983)

Big game	- 90 141
Small game	- 31 221
Fishing	- 91 697
Fur-bearers	- 4 000

Report (program highlights)

ONTARIO MINISTRY OF NATURAL RESOURCES (MNR)

The new emphasis on co-operation with all resource-users' groups and interested agencies and shared responsibility continues to steadily enhance the effectiveness of wildlife management in Ontario. This new approach is evident in many of the following highlights.

Beginning a new partnership to protect wetlands

Ministry staff, with the assistance of the ministries of Housing, Agriculture and Food, and the Environment have developed new provincial guidelines to manage and protect Ontario's wetlands. It is planned that guidelines put before the Legislature in April will lead to a policy statement under the provincial Planning Act, and will be finalized after testing, refinement, and consultation with all affected government departments and the public. The basis of the guidelines is a standardized wetlands evaluation system that divides areas into seven classes, according to their significance. The guidelines developed jointly by Environment Canada and our ministry, with the assistance of the Federation of Ontario Naturalists and Ducks Unlimited, will assist municipal governments, conservation authorities, and agencies involved in land-use management.

Co-operative study and reintroduction programs

In 1983-84, Ontario funded the preparation of four status reports to evaluate species of concern for designation as rare, threatened, or endangered. These reports, in turn, generated four additional reports commissioned with World Wildlife Fund "matched funds".

Ontario also co-operated with the Federation of Ontario Naturalists in its "Ontario breeding bird atlas", with the National Wildlife Federation in its annual midwinter Bald Eagle survey, and with the Royal Ontario Museum in documenting the winter invasion of Great Gray Owls.

This past year also marked a confirmed first nesting of peregrines in the province since the early 1960s. The nest was located in Arnprior, near Ottawa, and it indicates that Canadian efforts to reintroduce the species may be succeeding. "Whitney", one of the Peregrine Falcons released in 1981 from the ministry's Whitney Block tower in Queen's Park, returned from migration in 1982 and 1983. MNR staff, with help from school staff and students, also released three female peregrines from the Upper Canada College clock-tower last year.

Ontario has also undertaken a wild Turkey reintroduction program with the assistance of several US states and the at-home assistance of the Ontario Federation of Anglers and Hunters, and the Federation of Ontario Naturalists. In eastern Ontario, the Turkey release program is under the enthusiastic immediate supervision of the Quinte Wild Turkey Association.

MNR staff are also attempting an experimental reintroduction of Trumpeter Swans. Trumpeter Swan eggs from the Grande Prairie area of Alberta were shipped to

Ontario by CWS and the Alberta Division of Fish and Wildlife, and placed in the nests of Mute Swans, who became unwitting foster-parents. A pair of trumpeters hatched in 1982 were active this year at Ontario Place. Two birds, hatched and raised last year near Whitby, migrated to the Chesapeake Bay area, and at least one of these birds returned to the Whitby area.

The province also appealed to duck hunters in 1983 to voluntarily reduce their harvest of Black Ducks, whose numbers have dropped about 25% since 1968. Reductions in bag limits for Black Ducks are expected for 1984.

The ministry is also co-operating with CWS in the preparation of national and provincial waterfowl management plans.

A 5-year agreement signed in April 1983 will also see Ducks Unlimited spend $15 million and the ministry $1 million to maintain, restore, and create 16 000 ha of waterfowl habitat in northern and southern Ontario.

The ministry, in co-operation with CWS, Ontario Place, and the Metro Toronto Parks Department, also began relocating Canada Geese from the Toronto waterfront in 1978. In 1982, 440 goose eggs were collected and shipped to the Fort Frances and Pembroke districts of MNR, and to Nova Scotia. In addition, 1677 Canada Geese were rounded up and sent to the Owen Sound and Huronia MNR districts, as well as to Arkansas and Ohio. It is expected that the 1985 nesting population will approach the object of 50 breeding pairs along the waterfront.

New Federal-Provincial Wildlife Agreement

MNR signed a Canada-Ontario agreement in 1983-84 for co-operative and joint wildlife projects, such as inventories of wildlife or public property management for wildlife purposes. The agreement promotes co-ordinated action in areas of mutual interest and helps lessen duplication of effort.

Canada-Ontario Resource Development Agreement

Since 1949, Canada and Ontario have assisted the registered Indian people in utilizing the renewable natural resources to which they have access for their economic benefit. Each year, both governments spend a total of $500 000 assisting Ontario native people in such activities as fur-trapping, sport-fishing, commercial fishing, deer and moose hide collections, wild rice, tourism, and forestry. Last year, Ontario hunters turned in 15 000 deer and moose hides, which were tanned and distributed to Indian artisans.

New deal for Ontario's black bears

In co-operation with local outfitters, hunters, the Ontario Federation of Anglers and Hunters, and other groups, Ontario is moving towards changes in legislation and management policies affecting black bear. A long-term study by MNR staff indicates that bear populations are very sensitive to hunting pressure and that bear productivity is low. The first changes in bear-hunting regulations are expected for the fall of 1984.

. . . And keeping an eye on white bears

Under the International Agreement on theConservation of Polar Bears, MNR staff have been monitoring polar bear. During the fall of 1983, 204 bears were spotted--159 in Ontario and 45 in Manitoba. This is the highest total since the surveys began 20 years ago. MNR estimates that Ontario has about 400 polar bears. To improve counting methods and learn more about bear movements, MNR biologists this year plan to capture and fit polar bears with radio transmitters.

Job creation partnership helps wildlife

In the past 10 months, wildlife-related projects valued at more than $1.7 million have been funded under the auspices of the Canada-Ontario Special Employment Program (SEP).

Projects have included deer-habitat management, bear-predation studies, wetland inventories, moose-habitat studies, waterfowl-nesting improvements, and the preparation of habitat management plans. These projects contribute to resource management and reflect potential for innovation.

Project sponsors included municipalities, educational centres, and resource-users' groups. The projects also provided 3739 weeks of valuable work-related experience for the unemployed.

Enlisting computers to combat rabies

A computer program that will help MNR scientists in their efforts to vaccinate foxes against rabies was completed in 1983-84 at the ministry's research station in Maple, with the co-operation of Queen's University.

The program will be field-tested in southwestern Ontario in the fall of 1984. Using computerized data to determine where foxes can be found and how far they travel, MNR scientists will know where to place the attracting baits that contain rabies vaccine.

The computerized information, which is a simulation model of rabies outbreaks, could eventually lead to a province-wide vaccine distribution program for all wildlife.

Multiplying Ontario moose

For several years now, MNR has been working with the Ontario Federation of Anglers and Hunters, outfitters, individual hunters, and other groups on a program to double provincial moose numbers by the year 2000. Through better management and a new selective harvest program introduced by MNR in 1983, wildlife specialists hope the moose herd can be increased to 160 000 from today's 80 000.

Under the new program, resident hunters apply for a special validation tag, and, if successful in a computerized draw, can harvest either a cow or a bull in a specific management unit. A limited number of tags is available for each unit. No limits are placed on the calf harvest, but cows and bulls get special protection because fewer tags for adult moose are issued.

The new program also involves special consideration of Ontario tourist outfitters: 10% of the provincial cow and bull harvest is allocated to the tourist industry for their resident and non-resident clients.

. . . And studying ticks

A study of captive, tick-infested moose, and of the productivity of ticks in different field habitats, revealed new information on the relation between moose and winter ticks, on calving sites, and on the numbers of new-born calves.

Helping deer multiply

Deer numbers in the central deer range of Ontario have increased by about one-third since 1980, the year when the principal components of a new program were introduced. The program controls the harvest, especially of anterless deer, and hunters' numbers. Winter deer-yard maintenance, including supplementary feeding, continues in most major deer yards. New deer-management standards and guidelines address habitat management, controlled deer hunts, antlerless tag allotment, population inventories, and predator control.

. . . And improving inventory techniques

Wildlife specialists have also re-analysed information from a 31-year data series on the white-tailed deer population. Preliminary results indicate hunter-kill per unit effort--based on intensive, locally collected measures--may be a good indication of population levels. The levels, however, must be adjusted by statistical techniques for weather and other variables that affect hunters' success.

Fur management

Ontario is implementing its "Private lands trapping program", which is similar to the registered trapline system that has been successfully operating for more than 30 years. Humane-trapping legislation, both statutory and regulatory, has been enacted. Further refinements are being discussed with trappers and groups devoted to humane treatment of animals.

MNR is also proceeding with the patenting of trapping inventions, in addition to the Novak foot-snare that was patented in 1981. Field testing of new devices was carried out all last year.

MNR has also entered into an agreement with the Ontario Trappers' Association. The OTA is printing and selling the trappers' educational materials. Sales revenue is being used to purchase teaching aids for the trappers' educational program. Many Ontario school boards are also requesting the trappers' educational kits.

Hunters' education

MNR has also developed a new hunters' educational guide with assistance from the Province of Alberta and the National Rifle Association. The new guides are

printed and distributed by the Ontario Federation of Anglers and Hunters to help purchase hunters' educational teaching aids.

Ontario also up-graded the requirements necessary to obtain a resident's hunting licence. Non-residents who become residents of Ontario must now pass the required examination to qualify for a resident's hunting licence.

We get requests

By the thousands--for information about wildlife. In 1983, about 660 000 hunting and 25 000 trapping regulations summaries were prepared in French and English.

Staff members also man booths at two major shows for sportsmen each year--the Toronto Sportsmen's Show and the Ontario Out-of-doors Hunting Show--as well as local fairs and shows throughout the province.

To celebrate National Wildlife Week in April 1983, the Ministry of Education sent special teachers' kits to all grade 4, 5, and 6 teachers across the province. The kits were prepared by the Canadian Wildlife Federation with some assistance from MNR. MNR staff gave talks about wildlife management to hundreds of school-children during the week, and left them with souvenir T-shirt transfers, puzzles, and bookmarks, as well as an increased understanding of wildlife management in Ontario.

A new poster picturing and describing Ontario's endangered wildlife species was also produced. The new poster replaces the former "Ontario fish and wildlife review" issue on endangered species--the most popular issue of that magazine that was ever produced. The new poster includes up-dated information and one more species not covered previously--the small whorled pogonia.

Report (program highlights)

PRINCE EDWARD ISLAND FISH AND WILDLIFE DIVISION

Activities of the Fish and Wildlife Division are directed at the conservation and protection of the province's wildlife and sports-fish resources. Conservation and protection are realized through sound wildlife management and enforcement.

The interest in these resources is demonstrated by the collective annual sale of approximately 22 000 angling, hunting, and trapping licences. It should be noted that this figure does not represent the true participation of consumptive users (anglers, hunters, and trappers). An exemption to the purchase of an angling or hunting licence is afforded to resident commercial fishermen and their wives, resident farmers and farm labourers and their wives, and individuals under the age of 16 years.

Interest in the province's wildlife and sports-fish resources is also expressed by such non-consumptive users as hikers, skiers, photographers, bird-watchers, and people who enjoy nature-orientated outdoor activities.

Program highlights for the fiscal year 1983-84 include the following.

Fisheries

A new dam control-structure, with fishway and draw-down, was constructed at Carragher's Pond, Emyvale. As a result of construction, the former water level in the pond has been re-established as habitat for sports fish, waterfowl, and aquatic fur-bearers. Ducks Unlimited Canada provided engineering and financial assistance.

Application of agricultural limestone to the waters of Glenfinnan Lake, Tarantum, effectively raised the pH of the lake, resulting in improved water quality for rainbow trout survival. Continued monitoring of the pH in O'Keefe Lake, Avondale, has indicated the effectiveness of this technique in improving water quality for trout survival.

Use of fishways by migrating trout and salmon was studied at four provincially controlled dam sites, in co-operation with Fisheries and Oceans Canada. Sites investigated included Bell's Pond, New Glasgow; MacPherson's Pond, Flat River; Knox's Pond, Montague; and Strickland's Pond, Murray River.

Financial and supervisory support was afforded a NEED project sponsored by the PEI Wildlife Federation. The project involved stream improvement to three water systems within the province--Wilmot River, Prince County; Pisquid River, Queens County; and Murray River, Kings County. As well, supervision was provided to summer students carrying out stream improvement on selected streams in each county. These students' programs were sponsored by local branch members of the PEI Wildlife Federation.

Upland game

A new pheasant rearing and release program was initiated in the Kensington to Victoria area of the province, involving 4-H members in seven individual clubs.

The objective of the program was to introduce club members to wildlife management via direct participation.

Initial tenders were called for wood-cuts on lands under Fish and Wildlife Division management in 1983 in co-operation with the Forestry Division. The division is currently assessing all properties under its management for the purpose of developing meaningful management plans that will reflect public access and use, and improved habitats for wildlife.

Population and productivity surveys were continued as in previous years, with the "Game harvest survey" as an example.

Waterfowl

An inventory of 3000 wetlands on PEI was completed in May 1983. With the completion of this inventory, a waterfowl breeding-pair and brood survey was initiated, using the wetland inventory as a base. The survey of 100 sites will afford meaningful production data to be used in developing management programs for wetlands. The program was undertaken in co-operation with CWS.

During the spring waterfowl migration, an effort was initiated to live-trap and band migrant Canada Geese for the purpose of determining migration patterns, both spring and fall. This program was also carried out with the co-operation of CWS.

In 1983, it was the final year of a 5-year study directed at determining the most effective time-table for draw-down of freshwater impoundments for maximum productivity.

The woodcock breeding-bird census, conducted annually by all states and provinces within its range, resulted in an increase in the breeding-population index in PEI from 1.2 to 2.1 birds per comparable route.

Fur-bearers

With the healthy increase in the beaver population, the problems associated with nuisance beavers plugging highway culverts increased. In co-operation with the Department of Transportation and Public Works, an effective program to address problem sites was realized in 1983.

The division continued to work with the PEI Trappers' Association at improving trapping techniques and pelt preparation for wild fur-bearers. Wild fur trapped in the province again resulted in a good return to trappers, with the value of wild fur harvested in 1983 approaching $164 000. This represented a substantial decline over 1982 due to a decline in prices paid for furs offered, and not to a reduced harvest.

Hunters' safety

As a result of an amendment to the Fish and Game Protection Act, all first-time hunters and those under 16 years of age will be required to show proof of

successful completion of instruction in firearm safety before being permitted to hunt in the province, effective 1 September 1984.

With the assistance of volunteer instructors and interested school teachers, 402 experienced and first-time hunters were afforded instruction in the safe use and care of firearms in 1983.

Enforcement

Enforcement efforts resulted in 63 violations being reported under the various acts regulating the conservation and protection of fish and wildlife in the province.

With an amendment to the Fish and Game Protection Act, the Minister responsible for the Fish and Wildlife Division has been empowered with the opportunity to develop meaningful regulations respecting the care of wildlife in captivity.

Report (Program highlights)

QUEBEC WILDLIFE BRANCH

Co-ordination of Indian and Inuit Affairs

This division provided administrative services for the Hunting, Fishing, and Trapping Co-ordinating Committee, and prepared, in accordance with a Cabinet resolution, a bill respecting the assistance program for the hunting, fishing, and trapping activities of Inuit covered by The James Bay and Northern Quebec Agreement. Financial aid included $1.6 million to the Kativik Regional Government for the Inuit hunting, fishing, and trapping program; $90 000 to the Naskapis Development Corporation for its hunting, fishing, and trapping assistance program; $50 000 in operating funds to the Cree Trappers' Association; and $90 000 to the Kativik Regional Government for the development of recreational activities in northern villages.

Other commitments included monthly meetings with co-ordinators from other departments and the Secretariat for Government Activities in Indian and Inuit Affairs (SAGMAI); meetings with the Restigouche, Maria, and Sept-Iles-Maliothénam band councils and the Attikamek-Montagnais Council on harvesting methods in several salmon rivers; and, along with SAGMAI, preliminary meetings and negotiations with the Attikamek-Montagnais Council regarding land claims and hunting, fishing, and trapping rights.

Terrestrial Fauna Division

The division took part in amending the Wildlife Conservation Act in accordance with the findings of the Parliamentary Committee in November 1982, and co-ordinated an aerial inventory of big game and, in particular, completion of the last phase of the 5-year plan in the regions concerned; and informed all concerned about projects and safety standards.

Big-game Service

In evaluating distributions of big game, this service conducted a study of wolves and their predator-prey relationships in the various southern Quebec regions that they share with white-tailed deer and moose. Other surveys included sport hunting harvests by hunting zone and the amended regulations governing them, and also subsistence hunting harvests on lands subject to agreement between the natives and the government.

Studies were made of the effects on caribou of the use of water for hydro-electric reservoirs in northern Quebec, the causes of caribou-calf mortality, moose ovulation and calving rates in southern Quebec hunting zones, and the effects of various hunting pressures on moose populations. A comparative study was made of survival rates and habitat utilization of orphaned calves and of calves with mothers during their first winter; and researchers followed the dispersal of several immature (1- to 2-year old) moose.

The service carried out two wildlife management projects (dispersal islands and uniform density) designed to optimize moose harvests. Consultations began on

the best methods of establishing limits for cow and calf harvests, either through licence quotas or through a short open period towards the end of the hunting season without special quotas. A study was made of diet and population among black bear in southwestern Quebec. The muscles and skulls of wolves and coyotes were collected for a study on criteria for differentiating between them.

Small-game Service

Fur-bearers

Trapping methods have been revised in conjunction with the department's regional offices and the Quebec Independent Trappers' Association. This service has also proposed solutions to the problems of using dogs for hunting, revised the status of fur-bearers and modified trapping regulations in accordance with changing needs and knowledge, studied potential techniques for harvesting Canadian lynx and marten, tested new, more humane traps for black bear and muskrat, proposed amendments to regulations governing the types of traps in use, and prepared standards governing the use of public lands by trappers.

Birds

In conjunction with CWS, the service has prepared a first draft of a waterfowl management plan concerning protection and harvesting problems, possible solutions, and the importance of increased co-operation between the participants. It has also co-ordinated ecological studies in the flood plains of Baieville in conjunction with the Trois-Rivières regional office, CWS, the Lands Directorate, and Ducks Unlimited Canada, and has studied the effects of diking these lands.

Steps were taken to establish wildlife sanctuaries in the Kamouraska and Rivière-du-Sud (Iberville) marshes, following the study conducted by Public Works Canada, and Supply and Services Canada on acquisition costs; also to establish a sanctuary in the Beauharnois Canal area (a site where the hunting of migratory birds is prohibited).

Ecological studies

These studies involved a proposed wildlife habitat conservation policy for Quebec, preparation of information papers on the need to protect wildlife habitats, study of techniques for inventorying and classifying wildlife habitats, development of techniques for restoring and improving water bodies, preparation of a "List of Quebec vertebrates" and of a methodological guide for wildlife and wildlife habitat impact studies, study of the impact of various major development projects on wildlife and wildlife habitat, and analysis of data obtained from the "Big-game records", in order to inventory the number of animals taken.

Aquatic Fauna Division

This division has established health standards for fish hatcheries, prepared a document for consultations on the orderly development of fish production, developed techniques for rehabilitating breeding stock of Atlantic and landlocked salmon, monitored disease prevention in government fish hatcheries, and

studied certain diseases affecting fish in Quebec waters, and ways of protecting salmonids against Aeromonas salmonicola (furunculosis).

A catalogue of the levels of fish stocksand fishing harvest in parks and reserves has been published, and work carried out on preparing fish production plans, identifying the biophysical characteristics of spawning streams, studying the duration of the effectiveness of killed-virus vaccine against infectious pancreatic necrosis in brook-trout fry, conducting a photo-interpretation of 30 rivers on the North Shore, testing control structures for young and adult salmon in three control rivers: the Saint-Jean (Gaspé), Baie Trinité (Middle North Shore), and Bec-Scie (Anticosti Island); determining the fish production potential of the Escoumins River, studying Atlantic salmon in the George River (New Quebec), and conducting hydromorphological surveys of the Eternité River.

Staff have participated in public hearings on insecticide spraying for spruce budworm, and prepared a work plan for a study of the effects of acid rain on wildlife. They have made physico-chemical and ichthyological inventories of bodies of water in various management and conservation zones (ZEC) in Quebec, studied the distribution of species of exotic fish in Quebec, conducted a chrono-sequential study of the reproduction of Atlantic tomcod in the Sainte-Anne-de-la-Pérade River, defined the problems involved in harvesting anuran, conducted a population survey of commercially harvested shrimp in Lac Saint-Pierre, and prepared a guide for the use of electrical current in inventorying young salmon.

Wildlife Areas Division

In the course of the year, staff prepared a plan of action for wildlife sanctuaries, developed, in conjunction with private agencies, a management plan for wildlife on their properties; applied regulations in administered lands: reserves, controlled exploitation zones (ZEC), outfitting areas, and trapping lands; reviewed 152 outfitters' leases, processed 98 new requests for outfitters' licences, issued 30 new licences, and transferred 25 existing licences; determined a rate-setting formula that would allow ZEC hunting to become self-financing, and developed a method of preparing management plans for ZEC.

Activities also included issuing and monitoring 175 fur-traders' licences outside the Montreal region, collecting duty on furs outside the Montreal region ($170 302), and issuing 156 trappers' leases in region 07.

The division implemented the "Forma-faune" program, which involves 10 training sessions for those who are responsible for ZEC and outfitters. It also introduced new ways of managing salmon rivers where private clubs were located, such as starting the "Société de gestion de la rivière Grande Cascapédia", and revising management techniques in the basin in the Ristigouche River and the Sainte-Marguerite, Mistassini, Franquelin, and des Anglais rivers.

Wildlife Conservation Division

An important task was participation in amending the Wildlife Conservation Act and numerous orders respecting hunting, fishing, and trapping. A total of 57 400 hunter's certificates were issued, 46 500 of which were for new hunters.

Sales amounted to 2 120 700 hunting, fishing, and trapping licences by some 1700 agents. In response to regional requests, 550 biological speciments were analysed by the medico-legal group of specialists.

Staff prepared an administrative guide for wildlife conservation officers, outlining steps to follow during fur-trading inspections, gathered data for a mathematical model for human resources allocation in wildlife protection, studied the pressure exerted on wildlife by poaching, developed methods of controlling potential poaching of hatchery-raised brook trout, and several new operational techniques that will eventually be made available to wildlife conservation officers. Inspections covered approximately 4000 weapons.

Over 150 instructors received training in the following areas: hunting weapons inspection and adjustment (50), safety in weapons handling (50), survival and orientation in the forest (25), and processing and preservation of the meat from game and fish (25); another 500 instructors were trained in firearms safety and 75 in hunting weapons inspection and adjustment. There was basic training for 10 wildlife conservation officers (including 5 natives), 15 shooting instructors, and approximately 100 bow-hunting instructors; and training for 50 wildlife conservation officers. An agreement was signed with the Hauterive Cegep for the establishment of a college certificate program in hunting and fishing management.

The division prepared and distributed two brochures: "Living with wildlife" and "Living with wildlife and protecting habitats", as part of the educational program on wildlife protection and conservation (PESCOF). These brochures were also translated into English. A wildlife information program was started for 3000 young campers, and there was training for 75 summer-camp leaders. A program for first-aid in the forest was drawn up in conjunction with the Canadian Ski Patrol.

Conclusion

One of the main preoccupations of the Department of Recreation, Fish, and Game in 1982-83, as well as in programs already underway, has been to place emphasis on the co-ordination of activities in the area of recreation. By maintaining consultation, the department has obtained increased participation from all its partners. More specifically, discussions currently under way between the department and environmental groups for establishment of a plan should lead in 1983-84 to proposals and adoption of a policy to recognize and fund recreational organizations in the province.

The department has also prepared a 5-year development plan for Quebec parks, which it will soon be submitting to the Government of Quebec. The department and its partners will also draw up a proposal for regulations applicable to all parks.

We expect to adopt a policy regarding downhill skiing infrastructures in 1983-84. Also, climatic conditions, and urgent requests from the business community, will result logically in the department deciding in favour of an artificial snow system for Mont Sainte-Anne, and for investments to increase the capacity for visitors at ski resorts.

In the area of wildlife management, extensive consultations are currently under way to establish a fur-bearer trapping policy that will provide the Quebec public

with increased access to this activity for both financial and recreational purposes. Consultations to date will probably lead to the drafting of a bill on wildlife conservation and enhancement, which will be finalized and presented to the Government of Quebec in the course of the coming year.

With regard to municipalities in Quebec, the department also gave considerable attention to the adoption of a province-wide plan regarding heavy and intermediate equipment. An urban parks policy should also be forthcoming.

Report (program highlights)

SASKATCHEWAN WILDLIFE BRANCH

A major accomplishment of 1983 was the development of a "Wildlife management action plan in Saskatchewan" for the 1980s. This document outlines goals, general principles, and species priorities that will guide the activities and emphasis of the department for the next decade. Also identified were four major issues that must be resolved if the wildlife goals are to be attained, as well as general strategies which the department will use to resolve each issue. Wildlife programs are categorized as strategies for resolving one or more of these four issues.

Issue 1. Shortage of wildlife

Habitat-related activities

(1) Wildlife Habitat Protection Act - The Saskatchewan Government is passing an act to secure and preserve critical wildlife habitat found on provincial Crown lands. These lands, identified by Parks and Renewable Resources, will be protected from sale or alteration and managed primarily for wildlife. This act, which will protect over 1.2 million ha of critical habitat, is the most significant conservation measure in Saskatchewan since termination of market hunting.

(2) Habitat inventory - The "Terrestrial wildlife habitat inventory" was completed in 1983. This 8-year project entailed the mapping of agricultural Saskatchewan, delineating land use, land systems and soils, land tenure and critical wildlife habitat. The inventory has been used extensively in developing the Wildlife Habitat Protection Act.

(3) Heritage Marshes - Ponass Lake, the first Heritage Marsh in Saskatchewan, was officially opened on 4 October 1983. This 2835-ha marsh represents the first of five wetlands to be set aside for waterfowl and nature appreciation in the province. Other agencies, including Ducks Unlimited, Saskatchewan Wildlife Federation, and the Saskatchewan Natural History Society, contributed to the development of this marsh.

(4) Wildlife Development Fund - An additional 1070 ha of terrestrial habitat was purchased by the fund. The emphasis remained on acquiring white-tailed deer habitat; 355 ha were also acquired for a future Heritage Marsh site. The total acreage held by the Wildlife Development Fund now stands at 28 348 ha.

(5) Nicolle Flats Nature Interpretative Site - Officially opened on 27 August 1983, the site lies at the east end of Buffalo Pound Lake in the Qu'Appelle Valley. This site combines the objective of preserving wetland habitat with that of providing a developed interpretative site close to the large urban population of Regina and the Trans-Canada Highway. The marsh development is a federal-provincial project under the Qu'Appelle Implementation Agreement, and receives support from Ducks Unlimited. The site supports a variety of prairie wetland and upland wildlife species including White Pelicans, white-tailed and mule deer, beaver, painted turtles, Great Blue Herons, and concentrations of waterfowl.

(6) Fort-a-la-Corne Master Plan. This study was precipitated by the proposed development of a hydro-electric dam on the Saskatchewan River, which will have an impact on the Fort-a-la-Corne Wildlife Management Unit. The master plan is an attempt to mitigate the impact, and will provide guidelines for future joint management of forestry, recreation, fisheries, and wildlife. Emphasis has been placed on the management of elk and black bear.

Activities to increase wildlife survival

(1) Moose restoration area - The proliferation of forest roads and trails throughout the Provincial Forest has increased hunters' access and resulted in plummeting moose populations. To restore population, over 250 small forest haul-roads and trails were closed to vehicular traffic. Along four major roads, linear game preserves were established for 0.4 km on each side of the road, and one larger core game preserve was designated.

(2) Winter feeding program - A program is on stand-by ready to be implemented in severe winters. The feeding is coupled with the "Wildlife-landowner assistance program", designed to prevent losses to agricultural produce from hungry deer, elk, and bears.

(3) Vehicle restrictions - Restriction on vehicles to roads and trails in some of the core white-tailed deer areas was implemented last fall. This restriction was intended to reduce the deer harvest by 10 to 20%, improve hunting quality, and reduce landowner-hunter conflicts. This new initiative was well received and public co-operation has been excellent.

(4) Firearm safety/hunters' education - A new educational course and a manual were introduced in 1983. Chapters have been added on basic wildlife conservation, game identification, outdoor travel and survival, conservation laws, hunters' ethics, and care of game-meat. This course is mandatory for all young and first-time hunters. In the past year, 4228 people graduated from the course.

Issue 2. Threatened and endangered wildlife

Reintroduction

(1) Swift fox - 50 years after its extirpation from the province, the swift fox was reintroduced to the grasslands of southwest Saskatchewan. This is a co-operative program with CWS.

(2) Bald Eagles - 12 eaglets were collected from northern Saskatchewan to replenish Bald Eagle populations in the United States. Saskatchewan biologists worked closely with Pennsylvania biologists to collect and transport the eaglets.

(3) Population monitoring and habitat preservation for threatened and endangered species are on-going activities.

Issue 3. Wildlife/user/landowner conflicts

(1) "Wildlife-landowner assistance program" - This is an on-going program that emphasizes preventing damage by wildlife. Provision of fencing materials, blood meal, and intercept feeders are means of reducing ungulate damage, while electric fencing around bee-yards is used to curtail damage by bears. When these damage-prevention measures fail, compensation is made available. A continually larger number of landowners are receiving benefits as awareness of this program increases.

(2) "Waterfowl crop depredation program" - This continues to provide scare-cannons, lure-crops, and bait-stations to divert waterfowl from private lands in problem areas. A 5-year agreement with Environment Canada to share prevention costs has been signed.

(3) Problem beaver control - A new program to deal with large-scale beaver problems was developed this year, in co-operation with rural municipalities. Drainage systems are surveyed to identify all beaver dams and trouble spots. Dams are blown, beaver-proof culverts installed, and expert trappers are sent in to reduce populations. Municipalities are responsible for obtaining the landowners' permission for entry onto private land while department staff carry out the work.

(4) Livestock compensation - Owners continue to be compensated for livestock that have been injured or killed by hunters. In 1983, the department paid out $14 057 in compensation for the loss of 27 animals.

(5) Vehicle regulations - restricting use of all-terrain vehicles to certain periods of the day in some northern areas, and restricting all vehicles to roads and trails in some southern areas, had found favour with many landowners. Indications are that these regulations may reduce the amount of posted land in the province.

(6) Hunters' education - The addition of hunters' education to the firearm safety course provides the opportunity to emphasize hunters' ethics and respect for private property. In the long term, it is hoped that improved landowner-hunter relations will result.

(7) Farmer-wildlife survey - A cross-section of Saskatchewan farmers were interviewed via a structured questionnaire regarding wildlife, wildlife users, and wildlife habitat. Farmers' attitudes towards wildlife problems and their evaluation of current programs will be determined when the data analysis has been completed in 1984.

Issue 4. Unrealized wildlife benefits

(1) Information and education - Providing information about wildlife to the public is important in resolving all the four issues, but it is especially important for the maximum realization of wildlife benefits. Many opportunities exist that people are unaware of throughout the province, particularly for non-consumptive use.

(2) Provision of facilities - Interpretative sites throughout the province enhance wildlife viewing and other non-consumptive activities. The development of

the Nicolle Flats Interpretative Marsh in the Qu'Appelle Valley, close to Regina and the Trans-Canada Highway, is an example of that enhancement. This site features a wheelchair-accessible board-walk out into the marsh, an old homestead site, and deer and waterfowl feeding areas.

Information and education

The resolution of the above four major issues is highly dependent on the co-operation and understanding of the Saskatchewan public. For this reason, information and education have become a real priority. Films and public service announcements are being produced to reach a broad audience, and the media are contacted whenever newsworthy items develop. Brochures and booklets are also produced, mostly regarding programs, so that residents are made aware of the programs they can benefit from. Slides and films are available on loan to guest speakers addressing various groups.

Project WILD

The groundwork was laid in 1983 to make Project WILD, an elementary wildlife educational program, available to interested schools. Implementation will begin in 1984.

Report (program highlights)

YUKON DEPARTMENT OF RENEWABLE RESOURCES

Near the end of the fiscal year 1983-84, the Department of Renewable Resources was reorganized, and it is hoped that the new structure will be implemented by August 1984. There are now four branches in the department: Administration; Wildlife and Fisheries; Lands, Parks, and Resources; and Policy and Planning. While all these branches will have some indirect involvement with wildlife, the management of this resource, as well as the enforcement of the Wildlife Act and its regulations, are again carried out in the same agency: the Wildlife and Fisheries Branch. The new structure also makes provision for the regionalization of resource management efforts. So far, enforcement capability has been delegated to regions, while management has been conducted through headquarters.

The department is responsible for the management of terrestrial mammals and non-migratory birds; it also has an enforcement mandate over freshwater fisheries. CWS complements the work through projects on waterfowl and co-operative investigations on the Porcupine Caribou Herd. The RCMP assists with its enforcement efforts.

As far as habitat management is concerned, the Yukon faces similar problems to those of the Northwest Territories. Unlike the provinces, jurisdiction over most lands is retained by the federal government and is administered by the Department of Indian Affairs and Northern Development (DIAND). Its land-use section, which is based in Whitehorse, has the responsibility of issuing land-use permits for exploration and industrial development. Such development, and the referred-to jurisdictional division, can have major implications for the conservation of wildlife and habitat. Yukon government representatives serve as advisers on wildlife matters on the federal Land-Use Committee, and the Department of Renewable Resources itself has established a small habitat and land-use section.

Complicating the patchwork of overlapping federal and territorial authority is the issue of Indian rights and the Indian claims negotiations. The Yukon Act allows Indians to hunt wildlife on unoccupied Crown land, other than animals in danger of becoming extinct. Therefore, for a significant proportion of the local population, hunting regulations do not apply. Attempts are presently being made in the land-claim negotiations with Yukon Indians to have this provision and the Yukon Act rescinded in exchange for other, compensatory privileges, such as exclusive rights to certain pieces of land, preferential rights to trapping, fishing, and hunting in other areas, a guaranteed quota of certain big-game species, and monetary settlement.

Public input into wildlife management is brought about by the Wildlife Advisory Board, created in 1980. The board members are representatives of various interest groups, such as the Fish and Game Association, Trappers' Association, Outfitters' Association, and Yukon Conservation Society. The board meets at regular intervals, particularly when regulation changes are contemplated.

Staffing

A total of 12 conservation officers, stationed in three regions, enforce the Wildlife and Fisheries acts, as well as a number of other federal and territorial

natural-resource-related regulations. These officers also have responsibilities in relation to education, public relations work, and assistance in wildlife management projects, as listed below.

The technical section of the Wildlife and Fisheries Branch at present consists of 15 permanent staff members (biologists and technicians) who are responsible for wildlife management and carry out a number of investigations on big game, fur-bearers, and bird species as listed below.

Present projects

Moose

Fall aerial surveys have documented low calf-to-cow ratios (6-31 to 100) along with either declining or stable moose populations in the southern Yukon since 1981. A study was initiated in 1983 to determine the rate and cause of moose-calf and cow mortality as well as herd productivity. Sixty adult cows and 76 newborn calves were radio-collared; 89% of females were pregnant and 20% were carrying twins. A ratio of 30-40 females per 100 was documented for this area. Of the radio-collared cows, 7% died over a 7-month period (March-November). All were killed by predators. Wolves were responsible for 50%, grizzly bears for 25%, and either wolf or grizzly for the remaining 25% of the mortalities. Between parturition and 1 November, 82% of the newborn calves died from various causes. Of the calves that died, grizzly bears killed 67%, wolves 23%, black bear 2%, unknown predators 2%, and non-predator related causes 5%. The cause of mortality changes over time, with grizzly bears and wolves accounting for 63% and 7% of the mortalities respectively between parturition and the end of June. Between July and November, grizzly bears accounted for only 29% and wolves 59% of the mortalities.

These results form part of the basis for the current predator-control programs in the southern Yukon. Five prescription areas have been delineated for the predator-control experiment. In one area, wolves will be removed; in a second, grizzly bears; in a third, both wolves and grizzly bears; and in the remainder, the predators will stay unmanipulated. We hope this design of predator manipulation will shed some light on the questions of competition between predators and, at the same time, improve calf survival sufficiently to stabilize or increase local moose populations. The manipulation areas represent approximately 30% of the annual hunting effort on moose. The importance of this area to resident moose hunters and the restricted size of the removal areas form the remaining basis for the control program.

Caribou

The "Finlayson herd management project", a program incorporating predator control to increase the size of an intensively hunted Woodland caribou population, removed 50% of the region's wolf population by aerial-hunting methods. The subsequent fall calf ratio doubled from that of the previous year. Removal efforts during the winter of 1983-84 served to further reduce the wolf population by 75%. The status of the Finlayson caribou herd will continue to be monitored, and the management goal is to increase its size to previous levels, which are assumed to be 20 to 30% higher than present levels.

Co-operative programs for the Porcupine caribou herd between Yukon, CWS, USFWS, and Alaska Department of Fish and Game, continue to document juvenile mortality, calving-ground locations, and fly harassment. There is a continuing periodic assessment of the size, composition, and harvest of the Porcupine herd, because of its international distribution, its size of over 120 000 animals, and its economic and cultural significance, particularly to native people in the area.

Wolf

Wolf management and research began in 1983 in the southwestern Yukon, as part of a moose-predator study. Wolves were surveyed in a 6500-km^2 area in March 1983 and a 15 000-km^2 area in 1984. Radio-telemetry studies of 28 marked wolves in 11 separate packs allowed us to establish predation-rate data, territorial dynamics, and population-density data. An intensive sheep-wolf study was initiated, designed to examine the ecological relationship of gray wolves to Dall sheep. Based on a moose/wolf ratio of 8-12/1, the department initiated an aerial-reduction program for removing 40-50% of wolves in a 10 000-km^2 area in 1983-84.

Fur-bearer and trapline management

The department initiated a muskrat investigation in the Old Crow Flats area of northern Yukon. It also began a population study of wolverine in the Kluane Lake area of southwestern Yukon. Beaver and wolverine carcasses were collected and analysed for age, sex, and productivity.

An annual trappers' questionnaire was initiated to obtain their responses on the population levels and trends of Yukon's fur-bearers. This will be complemented by fur-bearer inventory studies (winter track-census, beaver and muskrat aerial surveys) in the Yukon River Basin and North Canol area.

The fur-bearer section has a continued involvement in trappers' education, particularly on the subjects of humane trapping methods, pelt preparation, and fur marketing. The department is involved in the development and support of the Fur Institute of Canada. Humane-trap development is a primary mandate of the Institute.

Birds

This year saw the continuation of several birds-of-prey projects, the initiation of several new projects, and the completion of others. On-going management projects included Peregrine Falcon reintroduction and population surveys on the lower Yukon River, waterfowl (primarily geese) surveys of rivers in the Peel River Drainage, and monitoring of Gyrfalcon populations. Annual ptarmigan censuses were conducted at Haines Summit, North-Fork Pass, and the Cantung Road Summit; Sharp-tailed Grouse were censused at Burwash Uplands.

New projects include a cross-fostering experiment of tundra peregrines with Gyrfalcon parents on the North Slope, and an evaluation of the interpretative potential of the Dempster Highway, focusing on birds of prey. The study of the Nisutlin Bay waterfowl staging area supported by the Yukon River Basin Study was completed this year.

Laboratory analysis

The laboratory was involved in data collection for several projects. Skull, horn, and kill information was collected from those game species designated as mandatory submissions. Sheep and goat jaws were again collected from all animals shot for continued assessment of tooth and bone disease.

Wolf and wolverine carcasses were necropsied and analysed to determine sex/age structure, litter size, reproductive potential, body weights and measurements, stomach contents, and general physical condition. Samples were collected at wolf kills during the winter to determine the species, condition, sex, and age of the prey.

The laboratory provides a service to the general public by ageing animals killed and by handling questions regarding diseases and parasites.

Information and education

This section of the new Policy and Planning Branch is responsible for the production and distribution of wildlife-related information to the general public, as well as firearms safety programs. In 1983, a change in staff left the position of Information and Education Officer vacant for 4 months.

Since October, the emphasis on information to the public has been through a series of regular resource bulletins, as well as by audio-visual presentations and public meetings. A new brochure, "Be bear aware", was developed as an activity and colouring book for primary children. A 35-mm slide/tape presentation, "Yukon moose: In decline?" was prepared by wildlife management personnel to inform the Yukon public about ungulate and predator management. This was followed by a 30-page report, printed in March 1984, and entitled "Current management of ungulates and their predators in the Yukon Territory".

Enforcement

Wildlife law enforcement, supervision of territorial campsite maintenance and fee collection, wildlife management assistance, and public relations were carried out by 13 permanent and two seasonal Conservation Officers within three regions and seven districts of Yukon. The Conservation Officers also oversee district and regional operational budgets, administration of traplines, and the sale of hunting, sports-fishing, trapping, big-game guiding, and outfitting licences. In six key district offices, there are permanent "half-day" clerk-typists employed as well.

Report

DUCKS UNLIMITED CANADA

D.S. Morrison
Executive Vice-president

Executive Vice-president's message

In 1983, Ducks Unlimited (DU) Canada met and exceeded all its targets. It saw significant progress in terms of new habitat secured, new projects completed, a high level of co-operation with provincial governments and other wildlife agencies, and greater awareness and participation from Canadians from all walks of life.

In terms of habitat developed, DU construction crews exceeded their 1983 target of 300 projects encompassing 16 200 ha. In total, 380 individual projects were worked on. As a result, 18 312 ha and 1318.6 shoreline km of new habitat were completed. An additional 47 097 ha were secured for future development.

While the construction program was tangible evidence of a successful year, equally significant were the results of our on-going discussions with provincial governments to enlist their support for our efforts. We were particularly pleased that the Government of British Columbia became the eighth provincial government to enter into a long-term joint habitat development program with us. This agreement represents a habitat development potential on a total of about 40 500 ha of new habitat over the next 30 years.

Although the Manitoba government has not yet endorsed the proposed Manitoba Heritage Marsh program, its decision in 1983 to renew our agreement in the Saskeram Wildlife Management Area near The Pas, Man., despite unrelenting pressure from a small group of farmers, was a welcome reaffirmation of its commitment to waterfowl.

During the year, we were also encouraged by the federal government's determination to develop with the United States a "North American waterfowl management plan" that more equitably addresses the responsibilities both nations share in conserving this vital continental resource. To support this effort, our Chief Biologist, Dr. Sandy Macaulay, was seconded to CWS for 18 months to assist in the federal-provincial negotiations required to develop the "Canadian waterfowl management plan".

In 1983, we experienced a 51% increase in contributors to a total of 29 500, and a 44% increase in Canadian contributions to $1.76 million. While the numbers alone indicate success, the enthusiasm and dedication of those who organized and attended any of the 126 DU Canada events across the country last year are also evidence of the high regard in which Canadians hold DU Canada and its conservation efforts.

The achievements detailed in this 1983 annual report are a tribute to many individuals. We acknowledge the generous support of DU Canada President, Dr. Herb Cowburn, the Board of Directors, our contributors both in Canada and the United States, the landowners and government officials who work with us by providing the land upon which we work, those at Ducks Unlimited of DU Inc., whose generosity and support is so vital to our operations, and the DU Canada staff's skills and commitment.

Table 1. 1983 program summary

Projects	BC	Alta.	Sask	Man.	Ont.	Que.	Atl.	Total
Projects begun previously, completed 1983	12	43	5	7	11	3	1	82
New projects completed	28	62	29	16	19	11	35	200
Projects operational in spring 1984	-	13	3	19	16	-	2	53
Project improvements	2	7	4	15	1	5	9	43
Project alterations or major repairs	-	1	1	-	-	-	-	2
Projects under construction	9	3	15	1	7	2	4	41
Total projects worked on (excluding minor repairs or maintenances)	51	129	57	58	54	21	51	421
New habitat developed (ha)	1486	5711	4701	1926	1484	1571	1418	18 297
New shorline developed (km)	121.5	378.0	336.4	200.5	78.2	71.9	132.1	1318.6
Maintenances	59	229	63	21	20	4	29	425
Minor repairs	1	20	21	27	2	11	4	86

Notes:

(1) Includes upland region adjacent to developed marshes within the areas controlled by DU by lease or reservation.
(2) Includes area and shoreline of habitat at the maximum level for water management (FSL).

Their efforts have made the past year one of progress and solid achievement, thus maintaining a tradition begun with Ducks Unlimited's inception 46 years ago.

1983 program

In 1983, the DU Canada construction program saw the completion of 18 312 ha and 1318.6 shoreline km of new waterfowl habitat across Canada.

A total of 421 projects within 254 marsh areas were worked on during the year. Of these, 380 projects were completed and operating or were scheduled to go into operation early in 1984. An additional 41 projects were under construction at year end.

DU field staff carried out 868 engineering reconnaissances on 98 030 ha to assess areas for future development. Surveys were conducted on 470 projects, including 84 existing projects re-examined to determine possible improvements.

Engineering work included 511 maintenances and minor repairs to existing projects, excavation of 86.1 km of level ditching, and construction of 496 standard and non-standard nesting islands.

DU Canada biological staff examined 2089 potential project sites representing 131 863 ha during 1983, and determined that 43%, or 900 basins, had development potential. An additional 559 previously examined sites were assessed and judged suitable, providing a grand total of 1459 individual sites for future development.

Biological staff across Canada also took part in activities such as nest-box placement, population surveys, banding, and re-stocking programs in co-operation with various government and private concerns.

DU Canada's achievements during 1983 continued to live up to the organization's commitment to improve, conserve, and create waterfowl habitat across Canada.

As of 31 December 1983, a total of 1 355 828 ha had been reserved and protected for future project development. To date, DU Canada has invested almost $180 million to develop 726 111.5 ha and 22 383.6 shoreline km of habitat to secure North America's waterfowl resource.

1984 program

Continuing the pattern of steady growth, both in terms of numbers of habitat development projects completed and hectares of habitat developed, that has characterized DU Canada's activities for the past decade, the organization will undertake 325 projects on 19 643 ha of new habitat development in 1984, its 47th year of operation. As well, project improvements representing 6075 ha will be carried out.

Co-operative wetlands habitat development agreements between DU Canada and most provincial governments are now in place. These will define some of the major areas of DU activity in 1984, notably in Alberta under the "Wetlands for tomorrow" program, and in Saskatchewan, where the Saskatchewan Heritage Marsh program has already resulted in significant co-operative wetlands development.

Although a joint habitat conservation agreement with the Manitoba government and other Manitoba conservation groups is still pending, the government's decision to renew our agreement in the Saskeram Wildlife Management Area near The Pas represents an opportunity for extensive habitat development within the 46 575-ha Carrot River Triangle. The first phase of this long-term program will begin in 1984.

Biological and engineering reconnaissances to determine and assess the potential of future developments will number 2000 and 1000 respectively in 1984.

Contributor Services

Equally impressive gains are expected in the Contributor Services area, where at least 50 new committees should be developed. These committees are expected to attract the support of 35 000 contributors during the year, an increase of 20% over 1983 numbers. Total 1984 Canadian donations are expected to exceed $2.6 million, an increase of almost 50% over 1983 totals.

Several new "Sponsor events" will be organized for contributors who donate $200 or more to the ducks annually. Some of the communities where new "Sponsor dinners" are anticipated include Vancouver, BC; Regina, Sask.; Kenora and Sault Ste. Marie, Ont.; and Halifax, NS.

Volunteer DU committees will again be working with local trap and skeet clubs, affiliates of the Canadian Wildlife Federation, and other outdoor-orientated groups to organize an estimated eight benefit shoots, 25 "Greenwing days", and other activities of interest to DU supporters.

The second DU Canada "Ladies only" banquet will be held in Winnipeg during April. This banquet, organized by the Winnipeg "Waterhens", is expected to maintain and perhaps surpass the momentum set by DU Canada's first women-only event in Regina in 1983 and attract upwards of 400 contributors.

British Columbia

The 1984 British Columbia habitat development program encompasses a total of 33 new projects representing 1134 ha and two project improvements on 95 ha.

On the lower mainland, Addington Point will be developed as one of the first coastal program areas. This 162-ha project involves replacing an old control structure and a section of dike originally built to protect the area for farming. Addington Point was purchased by the National Second Century Fund of BC to allow DU to develop its waterfowl potential.

In the Okanagan Valley, Vaseux Marsh will become a 57-ha waterfowl haven in one of the driest sections of the province. On land provided by CWS, the project will accommodate a variety of waterfowl including Mallard, Wigeon, Green-winged, Blue-winged and Cinnamon Teal, Shoveler, Pintail, Lesser Scaup, Bufflehead, Barrow's Goldeneye, Gadwall, Wood Duck, and Canada Geese.

The Alixton Complex, located south of Williams Lake, will involve construction of five earth dams equipped with variable-crest weirs and four weir controls to

develop about 100 ha of prime habitat. It is being developed in co-operation with the Alkali Indian Band, the major landowner on the project.

In northern BC, the 60-ha Heart Lake Complex, located south of Vanderhoof, will be developed. Work will consist of four water-control structures and 3.2 km of level ditching. Water levels in these areas are presently controlled by beaver dams. This has resulted in a lack of water permanency for some basins, and an inappropriate mix of open water and cover that is limiting the waterfowl production.

Alberta

The 1984 Alberta program will include work on 85 projects leading to the development of 5264 ha of new habitat. In addition, project improvements representing 441 ha will be undertaken.

The Sucker Creek project near Lesser Slave Lake, one of the larger in the Alberta program, will secure over 972 ha. Control construction on this project is scheduled to start at fall freeze-up in 1984. In addition to waterfowl, the project will benefit hay production and a variety of other wildlife, including muskrat and big game.

In the gently rolling parklands of east-central Alberta, the Killam Coulee project will raise water levels 0.5 m and yield 162 ha of new habitat. The new water control will reduce overly dense existing cattail stands and encourage excellent habitat for all major waterfowl species.

The Fowler I and II projects, north of Hanna, will avert drainage threats and utilize water from upstream agricultural drains to create five independent basins and 106 ha of secured habitat. Large production increases in Pintail, Mallard, Gadwall, Blue-winged Teal, Wigeon, and Canada Geese are expected in the area on completion.

Other Alberta activities will include anticipated repair or maintenance on 280 projects, surveys on more than 100 new areas, biological investigations of over 460 sites, and engineering follow-up on 230 areas.

Saskatchewan

Fifty-two projects representing 6075 new ha will be worked on in Saskatchewan during 1984: 47 will be new projects and five will involve completion of work on projects begun previously. Four project improvements are also planned.

Construction of the 567-ha Ross Lake System located northeast of Meadow Lake will be initiated during the first quarter of 1984. This system consists of five isolated basins which, because of excessive water depths, minimal marsh edge, and poor-quality upland nesting conditions, do not reach production potential. The development will improve marsh vegetation development for waterfowl and ensure flood protection on adjacent pasture and haylands, while maintaining stock-watering supplies.

Construction will also be initiated on the 1458-ha Chaplin Heritage Marsh project during 1984. This large prairie marsh, located west of Moose Jaw on the southern

edge of the Missouri Couteau, presently goes dry every summer, resulting in significant brood loss. By building 14.5 km of dikes and installing control structures, water will be assured throughout the year to produce 5000 additional birds annually.

The 890-ha Range Slough project located southwest of Melfort is also scheduled for development. In the past, waterfowl and other wildlife populations have suffered as a result of wide-ranging and rapidly fluctuating water levels. Flooding of the wetland fringe also reduced nest success for upland nesting waterfowl and created serious flooding problems for adjacent landowners. To eliminate this severe flooding and provide water-level management capability, the outlet channel will be improved and water-control structures will be installed.

Because of the success of the present Heritage Marsh program, negotiations will begin with the Province of Saskatchewan, the Saskatchewan Wildlife Federation, and the Saskatchewan Natural History Society during 1984 to develop an extended list of potential Heritage Marshes to be added to the present agreement.

Manitoba

A total of 54 new and carried-over projects and 32 project improvements will be initiated in Manitoba in 1984. In addition, a special Wood Duck rearing-release program will be launched in the Winnipeg/Red River Valley area.

Following signing of an agreement with the Manitoba government in 1983, work will begin on the Carrot River Triangle redevelopment. Construction is planned over a 4-year period, with work expected to begin immediately on the Paul Creek clean-out.

The 1036-ha Narcisse Complex and Jimmie Lake near Stonewall are also slated for development. In Brandon, work will commence on seven projects with the 210-ha Dutkywich and 81-ha Pockett and Tolton projects being the largest; 13 new projects are slated for the Dauphin area.

Work will continue on the Oak Hammock Marsh improvement and other major project improvements will be carried out on the Mac and Bone lake projects near Brandon.

Negotiations will continue with the provincial government, Manitoba Wildlife Federation, and Manitoba Naturalists' Society to pursue the Manitoba Heritage Marsh program.

The Special Projects team will be involved in final design of the Portia Complex and Carrot River Triangle developments.

Ontario

In Ontario, 49 new projects involving 1960 new ha are scheduled for construction in 1984. Highlighting the provincial program will be the 1417.5-ha Big Creek Complex, a critical Lake Erie waterfowl producing and staging area which, at present, is operating far below potential.

Greater use of the "cookie-cutter", an amphibious craft capable of cutting channels through vegetation-choked marshes, will be made in various areas to increase the marshes' nesting capacity and enhance their habitat quality.

Field investigations carried out in Northern Ontario's Clay Belt confirm good habitat potential on several significant wetlands in the Kirkland Lake-Timmins area. Work on two major sites in this new DU Canada frontier will get underway in 1984.

Elsewhere in the province, negotiations are underway with government agencies and private landowners for a variety of smaller developments. Given the high degree of co-operation DU Canada has enjoyed with these groups in the past, an optimistic future for habitat development is anticipated.

Quebec

Quebec construction crews will begin their 1984 new habitat development season by completing the Lac Ste-Anne project located about 129 km southwest of Quebec City, near the Maine border. In all, Quebec crews will develop six new projects representing 652 ha of new habitat. In addition, four project improvements on 202.5 ha will be carried out.

Work will begin on a variety of projects scattered throughout the province, including Rivière-des-Eaux Mortes near Trois Rivières; Parguiere, Stadacona, and Lac Georges, all of which are in the Rouyn-Noranda area of northwestern Quebec; and Phase II of the Iles-aux-Oies project downstream of Quebec City. Of the six new projects to be undertaken during the year, five already have government approval in the form of valid environmental impact certificates.

The Province of Quebec will begin to acquire land in 1984 for the South River project located at the south end of the Richelieu River on the New York State border, thus paving the way for major DU development on these valuable wetlands.

Increased public awareness of Ducks Unlimited, resulting from our Contributor Services initiatives and higher development profile in Quebec, have reinforced our prospects for future significant habitat development and contributors' support increases in the province.

Atlantic Provinces

In 1984, the Atlantic Canada habitat development program will consist of 45 individual projects representing a total of 944 ha of new habitat.

Although most activity will be centred on smaller, dispersed wetlands, two major projects are scheduled during the year. New Brunswick's Musquash project, located in the tidal zone of the Bay of Fundy, will be expanded by 53 ha. This area is excellent Black Duck habitat.

The 53-ha Eddy Road Cove project, located near Amherst, NS, on the Laplanche River system, will also be completed in 1984.

Other DU Canada development work will be dispersed throughout the four Atlantic Provinces: 18 projects are scheduled in Nova Scotia, 17 in New Brunswick, six in Prince Edward Island, and one in Newfoundland.

Extensive "cookie-cutter" work is planned on the Amherst Marshes Complex in Nova Scotia's Chignecto area and several smaller Atlantic Provinces projects where overgrown vegetation is choking out habitat. Staff will also examine selected existing projects to determine ways to enhance productivity.

1984 budget

Income

Requested from Ducks Unlimited, Inc.	$31 500 000
Contributors' revenue	2 600 000
Miscellaneous	150 000
Add 1983 under-expenditure	82 000
Total income, 1984	$34 332 000

Expenditure

Development of waterfowl habitat	$28 017 000
Operation and maintenance of habitat areas	2 822 000
Waterfowl population surveys	331 000
Public Relations and Contributor Services	2 269 000
Planning and control	893 000
Total expenditure	$34 332 000

Report

WORLD WILDLIFE FUND

International

The World Wildlife Fund (WWF) is a network of 24 national organizations around the world, which has now raised over $100 million in support of nearly 4000 wildlife conservation projects. Since 1961, WWF has helped save more than 100 bird and mammal species, nearly half of which were on the brink of extinction. It has created or supported 260 national parks. Priorities for action are defined by the world's most authoritative scientific conservation organization, the International Union for the Conservation of Nature and Natural Resources (IUCN), which represents over 1500 scientists and 500 governmental and non-governmental members.

The basic objects of WWF, as contained in the "Deed of foundation" (revised 1972), are as follows:

> To collect and manage funds and to disburse them through suitable international or national bodies or individuals for the worldwide conservation for mankind of the natural environment, including fauna, flora, landscape, water, soils, and other natural resources, by all appropriate means, including the acquisition and management of land, research and investigation, education at all levels, information and publicity, co-ordination of efforts and co-operation with other interested parties.

Canada

The fundamental purpose of WWF Canada is to conserve wild animals, plants, and habitats for their own sake and for the long-term benefit of mankind. Fulfilling this purpose means implementing the "World conservation strategy" in Canada to attain the following objectives;

- maintenance of essential ecological processes and life-support systems.
- preservation of genetic diversity;
- sustainable utilization of species and ecosystems.

Activities

To fulfil its purpose, WWF Canada will:

- create awareness of and raise funds for urgent Canadian and international conservation concerns;
- fund or help find funds for wildlife research, education, and action projects;
- use funding by WWF Canada as a catalyst to secure additional funding or assistance;

- co-ordinate WWF granting policies with those of other agencies;

- follow up on all projects to ensure that each achieves specific conservation results;

- assist decision-makers to formulate and implement sound conservation policies;

- provide students and the general public with scientifically sound information on Canadian wildlife concerns;

- bring conservation issues of international concern to the attention of Canadians, and issues of Canadian concern to the attention of the international community;

- co-operate with leading nature conservation groups, both in Canada as well as internationally through IUCN.

Priorities for funding

Throughout each of the program areas above, WWF Canada gives priority to:

- wildlife species or habitats that are endangered, threatened, extirpated or rare;

- wildlife species or populations that deserve special conservation action because of their significance as a natural resource;

- conservation concerns in the Canadian Arctic, an area identified for priority action by the "World conservation strategy";

- international projects involving Canadian leadership or a Canadian conservation concern.

Conservation program overview

In 1983, 70 WWF projects were funded in four major categories: Arctic, Endangered species, Habitat conservation, and Education. WWF Canada allocated $653 769 to those projects and other conservation-related expenses. We have doubled the amount allocated to conservation in just 2 years. In 1983, our fund-raising and administrative costs were 15% of our total income. Throughout, the challenge has been to support not just important work, but the most important work.

In addition to funding high priority projects, WWF Canada undertakes a large number of other activities important to achieving conservation results:

- Staff serve on the boards of more than 20 other leading conservation organizations.

- The Executive Director has been appointed to the Environmental Assessment Advisory Committee and the Canadian Environmental Advisory Council, which directly advise the Ontario and federal Ministers of the Environment respectively.

- WWF advises other non-governmental and governmental grant-giving agencies. We insist that our funding serve a catalytic role and be matched or exceeded by dollars from other sources on an average ratio of 3:1. So every dollar donated to WWF means three more for wildlife conservation.

- We speak extensively at selected universities, conferences, and media appearances across Canada, offering comment on current issues and constructive solutions based on scientifically accurate information.

Report

THE NATURE CONSERVANCY OF CANADA

L.H. Mayeda
Executive Director

Objectives

The Nature Conservancy of Canada is the only national, non-profit, non-political, trustee-governed conservation organization whose resources are devoted solely to the preservation of ecologically significant and environmentally important lands. It is involved all across Canada. Through its actions, many thousands of hectares of woodlands, swamps, marshes, prairie, seashores, and islands are being preserved.

The Nature Conservancy's purposes and objectives are:

(1) to raise funds to assist in the acquisition of natural areas;

(2) to accept gifts and bequests of land, securities, funds, and real property;

(3) to assist communities in preserving natural areas for wildlife habitat, recreation, and outdoor education;

(4) to provide expert advice on matters relating to the preservation of natural areas;

(5) to develop public awareness of the value of natural areas;

(6) to encourage scientific studies in natural areas;

(7) to encourage government and private agencies to establish nature reserves.

Executive and Board changes in 1983

Charles Sauriol resigned from the Board and as Executive Director, and now acts as Special Adviser to the Conservancy; Lloyd H. Mayeda replaced Sauriol as Executive Director (as of October); Anna L. Martin, Executive Assistant, passed away on 17 December 1983. Additions to the Board of Trustees include: Tom Beck, Calgary; J. Stuart MacKay, Toronto; and George M. Mitchell, QC, Halifax. Paul J.G. Kidd, Windsor, resigned from the Board.

Donors

During the year 1983, the Conservancy received financial support from 20 foundations, 90 corporations, and approximately 400 individuals. Support has also been received in the form of free air-time for our public service announcements on television and radio, advertisements in newspapers and magazines, and other donated services.

Land acquisitions

In 1983, The Nature Conservancy of Canada assisted in the purchase or donation of 14 properties utilizing $308 373 from our generous individual, foundation, and corporate supporters. This released such other funding that the overall value of these 544 ha acquired for conservation was $868 912. The 14 properties included the following.

Greenock Wetlands

- 162 ha, near Walkerton, Ont.;

- contains a forest cover dominated by red maple and black ash; this tract is located in the core of the 7290-ha Greenock Wetland;

- acquired by the Saugeen Valley Conservation Authority with support of the Conservancy through a grant from the Richard Ivey Foundation

Fleetwood Creek

- 324 ha, between Orono and Pontypool, Ont.;

- candidate as a Nature Reserve because of its unusual geological and other natural features;

- acquired by the Ontario Heritage Foundation with support from the Conservancy through a grant provided by private donors.

South-east Wooded Pine Island

- 4.7 ha, Go Home Bay, Georgian Bay, Ont.;

- donated by the estate of the late Joan Howard Robinson to the Conservancy; noted as a model island for artists and photographers, including members of the "Group of Seven".

Ile Aux Asperges

- 15.4 ha, near Montreal, Que. (in the St. Lawrence River);

- part of the on-going project, "Un fleuve, un parc", whose objective is to preserve 110 islands in the St. Lawrence River between Montreal and Sorel;

- purchased by the Conservancy with funds from an anonymous foundation;

- CWS has purchased several additional islands in this project.

Hay Swamp

- 40.5 ha, near Exeter, Ont.;

- largest and most significant wetland located centrally in the Ausable River watershed;

- acquired by the Ausable-Bayfield Conservation Authority with support from the Conservancy through a grant from the Richard Ivey Foundation.

Beverly Swamp

- 39.7 ha, northwest of Dundas, Ont.;

- part of a 1944-ha forested wetland; a recharge and headwater area for three conservation authorities; one of the most important wetlands in southern Ontario;

- acquired by the Hamilton Region Conservation Authority with the assistance of the Conservancy through a grant from the Hamilton Naturalists' Club.

Botanical Beach Upland

- 1.2 ha, near Port Renfrew on the west coast of Vancouver Island, BC;

- treed land behind Botanical Beach, which is famous for its biological, geological, and scenic features; has been used to study marine life for many years; provides a unique ecosystem; recommended for preservation as a marine park for scientific research;

- The Van Dusen Foundation, through the Vancouver Foundation and The National Second Century Fund of British Columbia, provided the Conservancy with the funding for the purchase. The Conservancy transferred the property to the Second Century Fund for later lease to the British Columbia government for management.

Misery Bay Nature Reserve

- 38.5 ha, Manitoulin Island, Ont.;

- 1000 ha were purchased by the Conservancy and the province between 1977 and 1982; the property acquired is adjacent to other properties in the Mac's Bay area of the reserve;

- the reserve is managed by the Ontario Ministry of Natural Resources, Parks Division;

- the Conservancy was instrumental in working with the Ontario Heritage Foundation to secure the Foundation's first natural heritage easement with the Ontario Paper Company for 121.5 ha adjoining the Misery Bay Nature Reserve.

Birdsall Wildlife Sanctuary

- 15.4 ha, on Rice Lake near Peterborough, Ont.;

- on-going project of the Conservancy; this tract will act as a buffer zone for the heronry, and protect breeding sites and migration stop-over points for waterfowl; good summer and winter deer range;

- 227 ha have already been purchased with assistance from the McLean Foundation. The Otonabee Region Conservation Authority acquired this property with support from the Conservancy through a grant from a private donor.

Cedar Creek

- 5.3 ha, near Harrow, Ont.;

- heavily treed with a Carolinian forest; deer, fox, coyote, and small animals and birds have been seen on the property, which lies in a predominately agricultural area;

- acquired by Essex Region Conservation Authority with support from the Conservancy through a grant from a private donor.

Minesing Swamp

- 87 ha, west of Barrie, Ont.;

- on-going project since 1972; have acquired 1863 ha of the 6480-ha swamp; it is one of the few remaining wetlands whose large size has made it a main habitat for many plant and animal communities; it acts as a major flood-storage area during periods of high runoff;

- as with all previous acquisitions in Minesing Swamp, the Nottawasaga Valley Conservation Authority acquired the property through a grant from the Conservancy that was provided by the Canadian National Sportmen's Fund.

Terra Cotta

- 36 ha, northwest of Georgetown near the Caledon Mountain, Ont.;

- a strategic strip of Niagara Escarpment land linking the Terra Cotta Conservation Area and the Silver Creek Conservation Area; provides public access to the Bruce Trail in this area;

- acquired by the Credit Valley Conservation Authority, supported by the Conservancy with a grant from the Richard Ivey Foundation.

Allan Park Management Unit

- Two properties of 28 ha each, southeast of Hanover, Ont.;

- added to 116 ha already owned by the Saugeen Valley Conservation Authority; used for wetland preservation, wildlife and woodlot management; acquisition prevented possible purchase by a fish-farming co-operative, whose activities would have threatened the Allan Park Management trout pond;

- acquired by the Saugeen Valley Conservation Authority, supported by the Conservancy with a grant from the Richard Ivey Foundation.

Canard River Marsh

- 16 ha, near Windsor, Ont.;

- situated on the Detroit River near the mouth of the Canard River; an integral part of the 405-ha Canard River Marsh; first step by Essex Region Conservation Authority toward acquiring and preserving the entire marsh; habitat for small mammals and birds; excellent staging area for ducks and geese;

- acquired by the Essex Region Conservation Authority, supported by the Conservany with a grant from a private donor.

Employment bridging programs

In 1983, the Conservancy participated jointly with the Ontario Ministry of Natural Resources in two employment bridging programs. The primary function of both programs was to expand investigations in conservation planning for areas of cultural, natural, and scientific interest. This included field inventory, mapping, and inputting the collected data on a computer.

Efforts to enhance public awareness about the need for conservation and the work being done by the Conservancy in this area were made in the forms of an 8-minute audio-visual slide show and an updated brochure.

In total, 24 people were employed for periods ranging from 4 to 22 weeks. Funding was provided by the federal and provincial (Ontario) governments.

The Dr. Robert Stanley Brodey Award

This award is sponsored by the Nature Conservancy and is given annually to a 3rd-year student in the Natural Sciences Honours Course at the University of Toronto, to enable him or her to do special research prior to completing the final course-year. Timothy Williams, a Trinity College student, was selected as the first recipient of the award. He plans upon graduation to undertake a masters' program dealing with conservation and the environment.

The award is given in memory of the late Dr. Brodey, formerly of Toronto, by his widow, who has presented the Conservancy with a capital fund to establish the award.

Publications

Newsletter: semi-annual, spring and fall. Annual report: available in the spring of the following year.

Report

CANADIAN NATURE FEDERATION, 1983

Membership

Membership in the Canadian Nature Federation (CNF) increased during the year to 20 500 individuals, with the voluntary affiliation of 95 conservation and environmental groups having a total membership of circa 185 000.

Gross income increased by 27%, and at the end of the year the Nature Federation had a favourable balance sheet.

Publications

Our main publication is the quarterly magazine, "Nature Canada", the only national nature magazine published in Canada.

A second regular publication--the "Canadian conservation directory"--lists the many organizations concerned with conservation and environmental matters: citizens' groups, governmental agencies and departments, nature centres and museums, as well as private consulting and professional organizations.

In addition, we co-publish the annual "Canadian nature calendar", and a selection of our own exclusive Christmas cards. "Nature art" prints of works by Canadian painters are another CNF program.

Nature Canada Bookshop

Our retail bookshop in Ottawa now operates on a full 6-day schedule. However, the main thrust of the program is still mail-order, as a service to those members and the general public in small towns and rural populations who do not have ready access to books on nature and the environment. Although books remain the backbone of the operation, recent expansions into new lines of nature-orientated products have been very successful.

All proceeds from bookshop sales are used to further our conservation work.

Canadian nature tours

In co-operation with the Federation of Ontario Naturalists, the Nature Federation offers members exciting opportunities to discover the many unspoilt corners of wild Canada. These are for back-packers and horse-backers, canoeists and camera buffs, and everyone in between. From the Everglades of Florida and the islands of the Bahamas to the icebergs of Greenland and the volcanoes of Iceland, we offer a wide variety of exciting and unusual experiences.

Canadian nature art scholarships

The scholarship fund of up to $5000 annually is to support promising young nature artists. Each year, applications are received from artists seeking to hone their skills; the only limitations are the artists' needs and imagination.

The 1983 award went to Melinda Brewer of Bellefeuille, Que. to support her project on the study of birds in the western Quebec and eastern Ontario regions.

Nature sanctuaries

The Clifford E. Lee Nature Sanctuary of the CNF (30 km from Edmonton) has been greatly expanded by the acquisition of additional land. Initial studies on the flora and fauna of the sanctuary have been completed, and walkways and viewing blinds are now in place.

Interpretative programs for school-children and adults are now in the planning stages to introduce visitors to the natural history of the sanctuary.

A small area of Conrad's Beach, NS, has also been acquired as an addition to our nature sanctuaries program.

1983 annual conference

A highlight of the year was the annual conference held in Sackville last August, and hosted by the New Brunswick Federation of Naturalists. A 2-day symposium on "Estuaries - Where the river meets the sea" outlined the beauty and diversity of the area, but also brought us face-to-face with the special challenges it presents.

To lighten the spirit, there were many social gatherings, including a lobster dinner, and a fine variety of trips to such diverse places as the fossil beds near Joggins, energy-efficient homes, provincial and national parks, and Grand Manan Island.

The 1984 conference will be held in Vancouver during the first week of July. The theme of the symposium is "Our Pacific province: The challenge of sharing and caring", and the trips promise to be spectacular: the Queen Charlottes, the Okanagan, and the Yukon, with boat trips for viewing killer whales and pelagic birds.

Environmental action program

The Nature Federation's conservation activities were based on strong interest in wilderness protection, wildlife management, and rare and endangered species. We continued our active involvement in arctic concerns, including conservation of Lancaster Sound and the Yukon north slope, where fragile northern ecosystems face pressure from hydrocarbon development. We promoted the protection of natural areas through our membership in the Canadian Council on Ecological Areas, and a number of submissions to Parks Canada and provincial parks departments. The CNF financially supported the important conservation work of other organizations, including the Arctic International Wildlife Range Society and the Coalition on the Niagara Escarpment.

Some highlights of our activities for 1983 are:

(1) Wildlife management

We were involved in a wide range of wildlife issues across Canada.

We were pleased at the publication of the results of the "Survey on the importance of wildlife to Canadians". The survey, conducted with support from the Nature Federation and a number of other organizations, provides concrete evidence of the great economic importance of wildlife. We used the survey results in a number of presentations to government officials and private organizations.

The controversy over wolf-control programs in the Yukon and British Columbia led to a CNF position paper on management of wolves in Canada. The paper was released in December.

(2) Rare and endangered species

The Nature Federation serves on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), participating each year in the committee's evaluations of the status of a number of wildlife species. The Nature Canada Bookshop serves as a distribution centre for COSEWIC reports.

Among the species that were of particular concern to us in 1983 were the Piping Plover, which is threatened by recreational beach use, and wild garlic, which faces pressure from commercial harvesting.

(3) Parks and protected areas

We had a major involvement in the public review of management proposals for Nahanni National Park Reserve, and made recommendations for management of the Kouchibouguac, PEI, and Georgian Bay Islands national parks.

(4) Forest management

The Nature Federation maintains that our forests must be managed in an environmentally sound manner, to provide abundant habitat for wildlife and to accommodate a wide range of forest-land users. During 1983 we carried this message to both federal and provincial government agencies.

We presented a brief to the Nova Scotia Royal Commission on Forestry, and were involved in a public review of the Ontario government's environmental assessment of forest management on Crown lands.

In November, CNF representatives participated in a seminar sponsored by the Canadian Forestry Service on the topic of naturalists' concerns in forest management.

(5) Acid rain

Our work on the acid-rain issue included participation in a Minnesota conference to organize the US Acid-Rain Network, a body that was formed to exchange information among American groups and individuals concerned about acid precipitation.

We continued our active involvement in the work of the Canadian Coalition on Acid Rain. Activities in 1983 included the preparation and release of a report on emission-reduction options for INCO's Sudbury smelter.

In 1983, it was another busy year of meetings and discussions with government officials and conservation groups, while responding to the many and varied concerns of our members.

Report

CANADIAN FEDERATION OF HUMANE SOCIETIES

N.R. Jotham
Executive Director

The following general principles serve as guidelines for the Canadian Federation of Humane Societies (CFHS) to develop its positions towards man's use of animals:

(1) CFHS recognizes that all animals have intrinsic value, remarkable complexity, inherent dignity, and are objects of moral concern.

(2) CFHS is not opposed to the appropriate use of animals by man.

(3) CFHS believes that no person has the right to cause avoidable pain or suffering to any animals, or to use animals indiscriminately or without regard for their well-being. When there is doubt about the suffering of an animal under the control of man, the animal must be given the benefit of the doubt.

(4) All animals under the control of man should be kept or transported in circumstances appropriate to their species.

Introduction

Animals have been an integral part of Canadian culture for over 300 years. They have been utilized for food, clothing, transportation, art, entertainment, research, pets, and a variety of important by-products; in the case of certain animals, their interaction with man has been truly symbiotic. Today, there is virtually nothing that Canadians do in their daily lives that does not directly or indirectly involve animals.

Canadians annually use, for a variety of reasons, some 400 million animals, and animal-related industries employ hundreds of thousands of people, contributing billions of dollars to the GNP.

No doubt because most Canadians believe that animals are sentient, as well as being important resources, some laws have been put in place that afford them a measure of protection. This was generally brought about by individuals who considered themselves as "speaking on behalf of animals" and subsequently organized humane societies or societies for the prevention of cruelty to animals in Canada some 120 years ago. Today, 128 humane societies operate in cities throughout Canada, and in the past decade numerous other groups have sprung up to champion animal-related causes including for example, to illustrate the contrast, anti-vivisection and pro-hunting groups.

The CFHS is a non-profit, charitable organization, which received its federal charter in 1957. It has 36 member-societies across Canada, collectively representing some 150 000 individuals.

Formed to address animal welfare issues of national scope, CFHS deals, at various times, with 10 different federal government departments, and often their provincial counterparts, that have jurisdiction in some way over animals. The

Federation takes a responsible approach towards issues related to man's use of animals and, through liaison with government, industry, and the scientific community has, over the past 24 years, made significant contributions to various laws governing the use of animals (see Appendix A).

While the CFHS is not an anti-vivisection nor generally a vegetarian organization, it does embrace the "respect for all life" ethic. However, at present, animals are considered to be chattel under Canadian law, although, given our changing cultural values and living patterns, there are signals that the status of animals will be raised. Animals will be considered as resources in the same sense as humans are considered resources, and consequently will be objects of greater moral concern.

Carrying this prediction a step further, the CFHS considers the construct of humaneness in its broadest definition as having a balanced sensitivity towards all life, thereby extending greater moral concern towards the ecosphere. However, since the mandate of this conference concerns itself with wildlife, the following will deal with CFHS programs related to Canadians' use of wild animals.

Trapping

Since its inception in 1957, the CFHS has expressed its concern over the traps and trapping systems employed to take some 4.5 million fur-bearing animals each year. CFHS programs and leadership in the search for more humane trapping systems has, and continues to be, a priority.

In the early 60s, the CFHS, in co-operation with CWS, stimulated an interest on the part of the National Research Council to undertake the development of humane traps. After several years, a prototype referred to as the "Mohawk" trap was produced, but subsequent tests on animals in the laboratory and some in the field showed the device to be unsatisfactory.

Following the NRC effort, the Federation began its own research and development programs at the universities of Guelph and McMaster. Some $60 000 was raised by the CFHS for this project and was expended over a 5-year period. While the research did not produce viable trapping devices, it did develop significant research methodologies and a trap-testing technology that have proved important in the most recent efforts to develop humane trapping systems.

The results of the CFHS program were provided to the Federal-Provincial Committee for Humane Trapping (FPCHT) in 1974, and the Federation supported the committee's work both morally and financially through its 7-year mandate. In fact, Neal Jotham, the CFHS Executive Director, participated on the FPCHT Scientific and Technical Sub-Committee from 1975 to 1981, and also held the position of part-time Executive Director for the committee.

Mr. Jotham also participated on a Humane Trap Advisory Committee set up by the Minister of Environment for British Columbia.

Over the past decade, the CFHS, through Mr. Jotham, has made scores of presentations on the subject of humane trapping to animal welfare and environmental organizations, governmental agencies, and trappers' associations. He also participated as a lecturer at numerous trappers' educational workshops. Also, many

articles were written on the subject and published in various print media to apprise the public and government legislators of CFHS involvement in the trapping issue.

More recently, in 1983, the CFHS sponsored a special scientific workshop in Calgary for the purpose of reviewing and explaining in detail the research and other programs that led to the recommendations published in the final FPCHT Report in 1981. The Federation provided some $3000 towards the meeting.

Following the presentation of the FPCHT report, the Federal-Provincial Wildlife Conference agreed that further efforts towards the development and implementation of humane trapping systems were still required, and a Task Force was struck to set up a mechanism whereby such a mandate could be achieved over the long term. The result of the Task Force's deliberations was the establishment of the Fur Institute of Canada (FIC). The CFHS agreed to Mr. Jotham's participation on the Task Force, and expended some $7000 over 2 years to cover his expenses for attending meetings of the group. While the CFHS chose not to become direct members of the FIC, Mr. Jotham has accepted the chairmanship of the Institute's Humane Trap Research and Development Committee.

In summary, the CFHS is dedicated to any responsible effort to make humane trapping systems a reality in Canada, and is willing to work with any agency to help bring that about.

Sealing and aboriginal whaling

(1) Sealing

The issue of the harp and hooded seal hunt has been a controversial and emotional issue since the early 60s, and the CFHS has been involved with it since that time. The CFHS has, on ethical grounds, never condoned the slaughter of seals, especially those newly born. However, CFHS opposition to the commercial hunt notwithstanding, it nevertheless sent observers to the Gulf and Front areas over the years. The Federation then made recommendations directly or in support of the Minister's Committee on Seals and Sealing, which resulted in a ban on the use of helicopters and fixed-wing aircraft to transport sealers to the ice, a quota system to reduce the number of seals killed, improved systems of slaughter to increase the "humaneness" of the kill, and other recommendations to assist in the enforcement of regulations.

In an effort to provide a semblance of order to the emotional rhetoric that surrounded the seal hunt each year, CFHS sponsored a symposium on "The seal hunt - A moral issue" in 1982. The proceedings provided a responsible and reasoned philosophical documentation as to why the hunt should have been phased out on moral grounds.

CFHS is, however, not connected in any way with the recent fish boycott being promoted by other animal welfare organizations.

More recently, the CFHS is turning its attention to the grey seal culling program sponsored by the Department of Fisheries and Oceans. There are legitimate questions as to the necessity for such a cull, and the potential for suffering on the part of many seals is enhanced because the majority must be shot in the water from some distance.

Another area that the CFHS is presently reviewing is Canada's involvement in the Pribilof Fur Seal Treaty. Attempts by some US animal welfare organizations to have the treaty rewritten in order to establish the Pribilof Islands as a sanctuary for fur seals are presently underway. The Federation is being asked to support the US efforts. However, preliminary investigations are pointing up some compelling reasons why a ban on killing a quota of sub-adult fur seals may, in the long term, be detrimental to an even greater number of seals and possibly to certain fish stocks. On the other hand, certain fur-seal stocks are on the decline and one major reason for fur-seal mortality is net entanglement. CFHS is also concerned about the level of stress caused the fur seals as they are herded from the rookeries to on-shore areas, where they are clubbed and exsanguinated. CFHS investigations of this issue continue.

(2) Aboriginal whaling

A difficult and complex issue is the aboriginal kill of beluga and narwhal. Modern rifles and power boats enable native people to hunt down and shoot at a great many more whales than would be the case using traditional methods. Reports indicate that a great many beluga and narwhal are wounded and lost, and that male narwhal are being taken mainly for their tusk.

Reports also indicate that some natives will chase belugas over long distances specifically to exhaust them and to effect a shot from closer range. Undoubtedly some of the calves cannot keep up the pace and die. It is ironic that this system is necessary, when reports have come to CFHS attention of biologists being able to get close enough to belugas to tag them.

On a positive note, CFHS has learned of an interesting program in northern Quebec, where officials are working with the local native people to demonstrate better methods of taking beluga. These co-operative efforts are apparently being received very well and should result in better conservation of the whales and relatively more humane killing systems. It is hoped that this program can be implemented in other northern Canadian communities.

Game-farming

CFHS is aware of the interest being expressed by a number of provincial governments, entrepreneurs and native people in the establishment of game-farming operations. The Federation has communicated with all provincial governments to obtain their regulations on the issue and any future plans they may have to allow game-farming development. A preliminary report has been prepared and is available on request.

The CFHS has expressed its concern about rushing into the development of this particular exploitation of animals. Firstly, there is the ethical consideration of removing animals from their natural ecosystems and maintaining them to varying degrees in "unnatural" surroundings. For example: Are the reasons for developing game farms justification for removing them from the wild? Will game farms ultimately provide a "better" life for the animals than if they were left in the wild? While game-farming is not a new phenomenon in many other countries, it is relatively new to Canada. Therefore, it is important to address the ethical questions now.

Other CFHS concerns are for the methods of animal capture and transportation, the systems of confinement, and the stocking density. All of which are particular concerns in the intensive rearing of domestic livestock.

Will game farms create a greater predator-control problem? Will the animals be slaughtered humanely, and will game farms be set up only to provide shooting preserves for armchair hunters?

CFHS is also very concerned about the inhumane methods of collecting antler velvet from deer and elk on game farms to supply an oriental aphrodisiac trade.

Wildlife in captivity

CFHS supports zoos, or aquaria, and other wildlife enclosures only where all the animals can live a reasonably normal life without avoidable constraints. Housing must meet both the emotional and behavioural needs of the animals.

The Federation or its member societies continue to receive complaints of animal neglect and poor husbandry conditions at a number of zoos and wildlife parks across Canada. The so-called roadside zoos or endangered-species sanctuaries, which operate solely for profit during the tourist months, are the worst offenders. Animals are, in fact, fed very little during the off-season. Some die and are eaten by their pen mates. Often these operations declare bankruptcy and the animals are abandoned.

The confinement of the higher "intelligence" animals, such as cetaceans and non-human primates is coming under greater ethical scrutiny by a public tuned in to responsible TV programs and media articles having a high scientific credibility. In response, the CFHS has begun communication with the Canadian Association of Zoological Parks and Aquaria with a view to working with that organization to develop standards and some system for accreditation.

Wildlife management

As mentioned, the CFHS believes that animals have intrinsic value, and that its definition of humaneness leads to a greater moral concern for the ecosphere. Therefore, with those basic principles in mind, the CFHS's interest in wildlife management programs is acute. However, it is fair to state that the CFHS believes that, but for a few exceptions, wildlife management is largely carried on not in the interests of the animals, but because there is a market for the by-products from them. This is not to suggest that wild animals generally are being overkilled in Canada, but it is to call into question the principles by which wildlife is managed.

The national survey on "The importance of wildlife to Canadians" pointed out that the vast majority of Canadians have an interest in viewing wildlife on outings, as well as an interest in it from their living-room or in a zoo, but are not interested in killing wild animals. These attitudes lead to very serious questions about the reasons for killing wild animals and subsequently, if the reasons are valid, whether it can be done humanely.

The CFHS shares the concern of wildlife officials, and other non-governmental environmental and wildlife groups, over the destruction of wildlife habitat for agricultural, industrial, and increasing urban population requirements. The CFHS is therefore interested in participating in discussions about this problem and helping bring a balanced sensitivity (humaneness) to the issues.

Unfortunately, in spite of the fact that the vast majority of Canadians use and enjoy wildlife in some way, the financial commitment to wildlife research not dependent on immediate economic gain is insufficient. Solid data banks concerning the behaviour and habitat-use of wildlife are sadly lacking. So too are more accurate data as to species interactions.

There is an unfortunate trend in Canada that, when there is no commercial use for certain wildlife, or for certain reasons that use is stopped, research funds are also cut off. As Canada continues to fund basic research in other sciences, so too there should always be a priority commitment to better understanding of our ecosphere and the wildlife with which man shares it.

CFHS believes that solid biological data are required to make intelligent decisions, both social and economic, concerning the use or non-use of wildlife. Without such knowledge, decisions are too often made on the basis of emotional rhetoric, and wildlife management becomes a hit-or-miss affair.

Conclusion

Although the CFHS has attended a number of Federal-Provincial Wildlife Conferences, this year marks the first time it has been given the opportunity to present a report. Therefore, of necessity, it is perhaps farther ranging than might be the case in future years.

The CFHS is indeed appreciative of the opportunity to present its views on a variety of wildlife issues, and was pleased to participate somewhat in the deliberations leading to the "Guidelines for a wildlife policy in Canada". Following presentation of the first draft of the policy, the CFHS provided a philosophical critique of it based on the belief that wildlife (animals at least) has intrinsic value. CFHS was therefore pleased to see that the intrinsic value of wildlife was recognized in the policy's "Guiding principle No. 7" and that a few elements of the policy itself reflect that belief.

The CFHS is interested in participating in on-going discussions concerning the management of wildlife. And, apart from consideration of the technology for humane treatment of wild animals, the Federation trusts that the ethical questions concerning the use of wildlife will receive a high priority.

Appendix A

The Canadian Federation of Humane Societies has been involved directly with:

1960	establishing the federal Humane Slaughter Act,
1965	establishing the first regulations governing the seal hunt,
1960-75	development of first scientific program for research and development of humane trapping systems,

1969	establishing amendments to the Criminal Code of Canada, Cruelty to Animals Section,
1969-	on-going participation in the assessment of research facilities through the program of the Canadian Council on Animal Care,
1971-73	development of humane transportation regulations in the Animal Disease and Protection Act,
1971	establishment of Advisory Committee on Seals and Sealing,
1974-80	participation on National Committee on Exotic Animals,
1975	sponsored mini-symposium on "Intensive livestock farming",
1975-81	participation on Federal-Provincial Committee for Humane Trapping,
1976,79,82	co-sponsorship of three national symposiums on "Pets in society",
1977	sponsored seminar on "Animals in food production",
1978	sponsored mini-symposium on "Humane Education",
1978	support for preparation of annotated bibliography on methods for killing whales,
1978-	participation on federal Humane Slaughter Committee,
1979,80,81	support for pig behaviour research programs,
1979	sponsored seminar on "Animals in research",
1979	sponsored seminar on "Humane education",
1980	carried out national survey of use of animals in testing toxic substances,
1980,81,82,83	administration of meetings to draft "Codes of practice for handling livestock",
1980-	participation on Advisory Committee on Whales and Whaling,
1981	sponsored first national seminar on "Animals in fur farming",
1981	support for Avian Care and Research Foundation falcon rehabilitation compound,
1981	sponsored seminar on "Raising the status of animals",
1982	sponsored First Canadian Congress on Animal Welfare with special seminars on "Intensive livestock farming" and "Animals in research",
1982	sponsored symposium--"The Canadian seal hunt: A moral issue",
1982	financial support for film "Companions" concerned with pets and the elderly,
1983	establishment of National Film Office to set standards for use of animals in films.

Report

WILDLIFE SOCIETY OF CANADA, 1983-84

D.M. Lavigne
President

The Wildlife Society of Canada (WSC) was formed in 1980 by a group of individuals who perceived the need for a strong united voice for wildlife biologists working in Canada. Among its objectives, the society is to:

- develop and promote sound stewardship of wildlife resources, including the ecosystems in which wildlife thrive;

- to undertake an active role in preventing human-induced environmental degradation;

- increase awareness and appreciation of wildlife values; and

- seek the highest standards in all activities of the wildlife profession.

Like all new endeavours, the WSC struggled through the first few years and its achievements were modest. The executive dealt with the bureaucratic details of establishing such an organization. With the initial enthusiasm the membership grew; predictably, it declined somewhat in subsequent years, leaving a reasonable core of members on which to build in the future.

Despite the growing pains, the WSC began to achieve some of its objectives. For example, it prepared position statements on the harvesting of Gyrfalcons in the Northwest Territories, and on the integrated management of wildlife, foresty, and agricultural resources on Canada's Crown lands.

The past year has been one of change and transition for the WSC. In October 1983, David Lavigne, University of Guelph, succeeded David Euler as President, and in January 1984, Scott Jones, Ontario Ministry of Natural Resources, Lindsay, was elected Vice-president. Editor Michael Dorrance brought out his first issue of the "WSC newsletter" in January 1984; another is presently in the works. The Wildlife Club at the University of Guelph became the first students' chapter of the WSC.

Recent activities

The most significant activities of the WSC in recent months were its involvement in the production of two additional position statements and the initiation of several other projects related to current wildlife issues in Canada. The first position statement, issued in February 1984, concerned the biological basis for on-going wolf-control programs in northeastern British Columbia; the second concerned proposed changes in policy related to the possession of birds for private use in Canada and in the United States. Both position statements were produced through the joint co-operation of the WSC and the Wildlife Biologists' Section of the Canadian Society of Zoologists (WBS/CSZ).

Other projects, in various stages of completion, include an assessment of interactions between seals (in particular, harp seals, grey seals, and harbour seals) and fisheries in eastern Canada (also in conjunction with the WBS/CSZ), an assessment of the decision to develop Mt. Allen as the site for alpine skiing events for the 1988 winter Olympics in Calgary, and the development of a position paper on game-ranching.

In the longer term, the WSC has undertaken the development of a general policy on predator-control programs. The need for a national predator-control policy was identified as a priority by some members of the WSC as early as 1982. The need for such a policy was reinforced during our assessment of the BC wolf-control programs, and by the extent to which predator-control programs have been initiated, or are presently under discussion, in this country. There is, for example, the on-going controversy surrounding wolf and grizzly-bear control programs in the Yukon. In addition, other provinces are reportedly considering the implementation of new or more intensive wolf-control programs, and the BC wolf situation remains unresolved.

Concern about the activities of predators is not restricted to terrestrial habitats. In recent months there have been repeated calls for the initiation of control programs aimed at reducing the perceived impact of various seal species on commercial fisheries in Atlantic Canada.

To date, a number of Canadian biologists have agreed to participate in the development of a predator-control policy and the WBS/CSZ has agreed to participate in this undertaking. CWS has indicated its interest, and has offered to co-ordinate the involvement of interested provincial governments in the preparation of such a policy.

Accordingly, we have begun to accumulate the necessary background information for such an undertaking. The WSC has also contacted several provincial ministries for information about existing predator control policies, and while some have been most co-operative, others have not.

Within the next year then, the WSC, together with interested parties, intends to draft an operational policy statement on predator-control programs in Canada. Such a policy should, in the very least, provide a basis for the development of improved regional and national policies for dealing with this complex and controversial management problem.

Forum on management

In May 1984, the WSC, at the invitation of the WBS/CSZ, participated in a forum, "Wildlife management in Canada - Past, present and future". The forum, held at the annual meeting of the CSZ in Wolfville, NS, involved a discussion of the "Guidelines for a wildlife policy in Canada", a document produced by the Federal-Provincial Wildlife Conference between 1980 and 1982, and approved by the Wildlife Ministers' Conference of 30 September 1982. The forum provided for a useful exchange of information and stimulated considerable discussion. The need for biologists to participate more actively in discussions of policy that affect their profession was emphasized by several participants.

One important outcome of the forum was the suggestion that the WBS/CSZ undertake a critical evaluation of the "Guidelines" for consideration by the Federal-Provincial Wildlife Conference during its 5-year review, scheduled for 1987. The WBS/CSZ acted on this suggestion and is presently forming a national committee to undertake this evaluation.

In the last year then, the WSC has taken strides to become more actively involved in wildlife management issues in Canada. We have found it extremely productive to work with other groups, in particular the Wildlife Biologists' Section of the CSZ. What limited dialogue we have had with CWS and the Minister of Environment has been most encouraging. The WSC therefore endorses the theme of the 1984 Federal-Provincial Wildlife Conference. Only by working together will governments, non-governmental agencies, and the private sector begin to resolve the pressing wildlife issues in Canada.

Report

CANADIAN WILDLIFE FEDERATION (1)

Membership

The Canadian Wildlife Federation (CWF) will be offering its services to members in both official languages, commencing in September of this year. Our official publication, "International wildlife", which includes "Wildlife report", will be published in the French language. The first issue will be released in January 1985. Our junior membership magazine, "Ranger Rick nature magazine", is scheduled to be released in French at a later date.

This initiative is representative of our commitment to promote the message of wildlife conservation to all citizens of Canada. By becoming a truly bilingual organization, we will be providing a valuable service to those Canadians who prefer to communicate to us in either official language.

During the past year, CWF has enjoyed a continued increase in its membership. We now represent approximately 528 000 individual Canadians across Canada. We anticipate a substantial increase of members and supporters in the coming year. A recent survey conducted in the USA ranks CWF on a membership basis as the second largest conservation organization in the world. On a per-capita basis, we were considered to be the largest.

Information/Education Service

Our Information/Education Service continues to respond to thousands of requests for information on a wide variety of wildlife and wildlife-related subjects, including acid rain, wildlife management, wetlands, and numerous issue-orientated matters. In order not to duplicate existing information, we distribute a large volume of publications, such as the "Hinterlands who's who" series and COSEWIC fact sheets, in addition to our own publications.

National Wildlife Week

This program is the subject of a separate report to this conference (see these transactions).

Project WILD

Last year, the CWF submitted a report on Project WILD to this conference in response to Recommendation No. 19, arising out of the 46th Federal-Provincial Wildlife Conference. The recommendation was put forward in acknowledgement of a need for an extension of wildlife educational programs on a continuing basis to serve schools and other agencies throughout any given year.

Project WILD (WILD stands for "Wildlife in Learning Design") is designed to bring two elements of society together that play key roles in shaping the future of natural renewable resources: resource management and education. Project WILD

is a program of learning consisting of a set of teaching materials that may be applied to all grade levels and all subject areas within formal and informal educational settings. Professional educators describe these materials as a supplementary, inter-disciplinary, educational program directed at providing learning experiences for young people at elementary and secondary school levels.

The goal of Project WILD is to assist learners of any age in developing awareness, knowledge, skills, and commitment to result in informed decisions, responsible behaviour, and constructive action concerning wildlife and the environment.

The CWF has prepared a "National implementation strategy proposal" that is to be presented to this conference as a separate report. The program, therefore, will be discussed in depth at that time.

Acid-rain program

During the past 5 years and continuing into 1984, the CWF has maintained an on-going acid-rain program. Our purpose is to encourage strong legislation in Canada and the United States so that a lasting solution can be achieved. To be effective, strong enforcement of clean-air regulations must support the legislation. Our priority is to ensure that a proper solution is secured, and that the Canadian and US public are aware and understand the need for abatement of acid rain.

In the United States, we have made a substantial, measurable impact by working with US conservation and wildlife groups in our effort to heighten awareness and encourage action. Our on-going effort to distribute information pamphlets and bumper stickers, produced through contractual arrangements with Environment Canada, has met with considerable success in arousing public opinion. This initiative has been coupled with our vigorous participation with conservation organizations, under the umbrella of the National Wildlife Federation, for direct representation to US government decision-makers on the need to reduce emissions and co-operate internationally towards a meaningful agreement on long-range trans-boundary pollution with Canada.

In Canada, our program to educate Canadians continues to progress satisfactorily. In addition to the 200 000 information kits produced last year, we have prepared 5000 acid-rain testing kits for use by youngsters and interested adults.

Over the past year, CWF has invested considerable time in participating in various speaking engagements across Canada and the United States on acid rain. We plan to expand our activities in the year to come.

Briefs, submissions, and conferences

Further to our submission, "Integration of forest and wildlife management", presented in 1983 at the Nova Scotia Royal Commission on Forestry, the CWF agreed to co-sponsor a conference, the Canadian Forestry and Wildlife Management Symposium, held 7-10 May 1984 in Vancouver, British Columbia, in co-operation with the Canadian Forestry Association. At that conference, we delivered a brief on the subject of "Recreational and cultural use of the forest". Our co-sponsorship was undertaken to strengthen and improve co-operation with and between

resource management agencies, and to promote the integration of forestry and wildlife management on Crown lands in Canada.

In response to a request from the Ontario Federation of Anglers and Hunters, the CWF prepared a brief for the Ontario Royal Commission on the Northern Environment, which provided an additional opportunity to reiterate our position on integrated resource management as it relates to forestry and wildlife. In addition, we went on record as opposing the then-proposed fisheries agreement developed and signed by the Province of Ontario and various Indian organizations in Northern Ontario. In our view, there is a strong indication that the agreement may be in conflict with the Constitution, particularly with regard to the transfer of jurisdiction for fisheries. We note that the federal government has not yet signed the agreement. CWF has offered recommendations consistent with provisions made, under respective fishery regulations, for Indian fisheries in all provinces other than Ontario, and we will continue to monitor closely further developments.

Earlier this year, CWF submitted four additional briefs to the 1984 Canadian Sports Fisheries Conference held in February 1984: "Allocation of fish to fishermen: An exploratory essay", "The allocation issue from freshwater fisheries experience", "Allocation of access to the fishery; A Canadian Pacific coast perspective", and the "Allocation of Atlantic salmon".

Our extensive effort to provide an in-depth and substantial perspective of fisheries issues at the conference is representative of CWF's firm commitment to deal with the urgent problems facing this resource. During the coming year, it is our intention to develop programs for the purpose of representing recreational fisheries interests in advising governments with respect to policies and strategies for fisheries management.

"World conservation strategy" summit

The CWF has taken the initiative to hold a "World summit conference" in June 1986 for the purpose of reviewing and assessing the implementation of the "World conservation strategy" (WCS). The conference will provide an opportunity for countries and organizations that have been active in developing and implementing the strategy to report on their progress, compare their experiences, and benefit from that comparison. The CWF is fortunate to have the services of Dr. David Munro, who is acting as co-ordinator.

In July 1983, a meeting was held in Gland, Switzerland, which brought together the organizations that had agreed to act as a body of sponsors and prepare for this conference: IUCN, the World Wildlife Fund (International), UNEP, AFO, CWF, and Environment Canada. The meeting was convened to discuss the proposal and commence with the formation of a summit organizing body.

On the international level, there is action in 35 countries with respect to WCS implementation. In some countries, action has been specific in detail and is moving into the implementation phase. The United Kingdom published a strategy in June, 1983. Australia and New Zealand have been very active, together with several developing countries. In November, IUCN held a meeting in Switzerland for all key representatives of developing countries that had been involved in the preparation of strategies.

In Canada, action has been initiated at the federal level through Environment Canada. Some action has already commenced in the provinces. The provincial role in implementing a conservation strategy is vital.

A public announcement of the conference was made in the fall last year to provide sufficient lead-time for activity and preparation. CWF released a "Provincial conservation strategy" dealing with the desirability of planning and implementing a strategy, patterned on the principle of the WCS. Copies of our "Provincial conservation strategy" will be distributed at this conference. It is our hope that jurisdictions will be stimulated to report on their progress at the international conference. The 1986 conference will provide a useful opportunity for a Canadian-orientated segment within its program either immediately prior to, or at the conclusion of, the meeting. This extra day could be devoted to Canadian experiences with the implementation process.

The CWF requests that the Federal-Provincial Wildlife Conference extend an expression of support and encouragement for this initiative and recommend the participation of wildlife agencies in this worthwhile event.

Wildlife Habitat Canada

The CWF welcomes the creation of Wildlife Habitat Canada, which will provide a national focus for the protection of wildlife habitats throughout Canada. Wildlife Habitat Canada is filling an important niche at the national level to stimulate habitat programs.

We were very pleased to be active participants in establishing this foundation. We were fortunate in enlisting the services of David Neave, Co-ordinator of the new organization, and offering his expertise in habitat management and administration by contract to CWS to develop the groundwork and launch the Foundation. We look forward to the Foundation's very promising future.

Awards and scholarships

The CWF awarded four "Orville Erickson memorial scholarships" in 1983-84 to: Joyce Andrew, who is currently completing her MSc program at the Institute of Animal Resource Ecology at the University of British Columbia; David Hervieux, completing his MSc at the University of New Brunswick; Hugh MacIsaac, completing his MSc at the University of Toronto; and Ian Fleming, completing his MSC at Simon Fraser University.

The distinguished "Roland Michener conservation award", which was established in honour of our former Governor General of Canada and Past Honorary President of the CWF, the Rt. Hon. Roland Michener, was presented to Dr. David Munro. All attending this conference are aware of Dr. Munro's impressive career in the field of wildlife conservation. We were honoured to present him with our award.

Our "Doug Clarke memorial award", established in 1982 in memory of a former CWF Director, the late Dr. C.H.D. Clarke, is presented annually to a CWF affiliate for the most outstanding conservation project carried out by an affiliate, its clubs, or members. We were pleased to present this award to the New Brunswick Wildlife Federation in recognition of their "Petitcodiac River rehabilitation program".

The CWF also provided financial assistance, $46 205 in total, for 12 wildlife projects that included research and studies on marine mammals, acid rain, grizzly bears, Bald Eagles, Peregrine Falcons, and Acadian whitefish.

Canadian Wildlife Federation (2)

An addendum on
PROJECT WILD

Last year, the Canadian Wildlife Federation presented a "Proposal for a national wildlife educational project" in response to the 1982 Recommendation No. 19. The proposal we brought forward was Project WILD.

Most participants in this conference are already aware of what Project WILD has to offer to a resource agency and the field of wildlife education. However, during my remarks on how this program may be implemented on a Canada-wide basis, I will be providing a description of objectives and background for the benefit of those who are unfamiliar with Project WILD.

The move to develop Project WILD took place approximately 4 years ago, when the US Western Association of Fish and Wildlife Agencies entered into an agreement with the Western Regional Environmental Education Council, known as WREEC, to produce a comprehensive wildlife educational program. (Incidentally, WREEC also developed Project Learning Tree, a program that may be familiar to some of you. Project WILD is a sister project and used PLT as a model). The agreement between the Western Association and WREEC included the design, development, field-testing, evaluation, revision, and initial printing of supplementary material for teachers.

The CWF became involved in this process at its early stages, in 1982, as an associate organizational sponsor, and acquired the Canadian rights to the program. At this time, we are completing "Canadian elementary activity guides" for Project WILD, which will be available soon in both official languages.

Our active participation in bringing the program into Canada stems from our concern, and the concern voiced by many resource personnel, that much of the general public (including many educators) lacks a conservation ethic or even a basic understanding of the role of wildlife in our society. This lack of knowledge or appreciation for the value of natural resources can be traced back to educational systems where natural resource classes are considered to be a non-traditional classroom subject.

"Activity guides"

As a result of our involvement in the development of Project WILD, we were convinced that this program would be an excellent vehicle to alleviate this situation and serve a number of useful purposes. The most important practical function, in our view, is the capability inherent in the program to meet the needs of educators on a day-to-day basis, through the use and proper application of activities set forth in an "Activity guide". I have attached a sample activity from the guide for your review.

All of the activities in the "Guide" are designed to be integrated into all traditional subject areas at all grade levels, without encroaching upon an already crowded curriculum. As you are all aware, wildlife can seldom be put into the curriculum as a separate subject. If it is to be taught at all, it

must be integrated into the basic subjects. Project WILD accomplishes that purpose. In doing so, it provides a ready-made method and sets out the guidelines whereby teachers may insert wildlife conservation concepts while they teach the required mandated subjects.

At the present time, there is no major, comprehensive national wildlife educational program operating in Canada. While there is an abundance of excellent wildlife resource groups, little actual curriculum material is available for immediate use by teachers and students. To make use of content-orientated material, most teachers must make room for an extra subject. Consequently, this "add-on" form of material has had limited success in today's classroom. Educators have avoided content-based literature in favour of that which involves investigation, questioning, data-gathering, critical thinking, and valuing skills. Project WILD provides this opportunity, plus the translation process necessary to make wildlife materials that are currently available more usable by teachers. Project activities, as is evident in the sample I have provided, do not take a stand on issues such as predator control or hunting. They do, however, provide a means for teachers and students to investigate such issues, interpret their findings, and reach their own conclusions.

The program does more than stimulate a process of interpreting issues and encourage the use of existing resource information and personnel. Project activities are based on a framework of concepts that begin with simple awareness of wildlife around us, and progress through management programs and cultural interactions. The aim of the program is to assist learners of any age in developing awareness, knowledge, skills, and commitment to result in informed decisions, responsible behaviour, and constructive action concerning wildlife and the environment. In other words, the goal is to develop a sense of responsible citizenship and teach students how to think--not what to think.

Project WILD "Activity guides" will not be available just for the asking. Experience in the United States, where the program has been in place for over a year, has demonstrated the vital importance of providing a well-planned introduction to Project WILD to educators. The most feasible method is through workshops, where educators, and fish and wildlife personnel, may work together to show teachers how to use the program to its fullest potential.

Implementation

The questions that arise are: how does one mass-produce and distribute Project WILD "Activity guides", and how will Project WILD programs be established provincially and locally in educational systems? These two primary considerations form the basis of a "National implementation strategy" the CWF has developed for your consideration. An in-depth proposal has already been sent to all resource agencies for review and comment. However, I would like to take this opportunity to highlight our proposal.

If the program is to succeed at grass-roots levels, in our view it is imperative that fish and wildlife agencies participate directly, in co-operation with the CWF, and play a central role in assisting in the implementation of the program within a province or territory. Our proposed "Implementation strategy" outlines how a province or territory can be involved, and what the CWF can offer as a national co-ordinator.

At the end of this report are two charts that essentially summarize the proposed structure we are seeking, and briefly describe the role of the CWF and the proposed role of participating fish and wildlife agencies. We are asking each province and territory at the very least to appoint a contact person to whom we could direct information on the program's progress. Once a decision is made to become an active participant in the program on the part of a province or territory, we request that a provincial/territorial co-ordinator be appointed with specific duties to implement Project WILD within his or her jurisdiction. The first task of a co-ordinator would be to establish an advisory committee consisting of key resource and educational personnel, as well as other individuals from private organizations, teaching institutions, other departments, etc.

A plan for implementing the program would also be required, together with what we refer to as "Facilitators' workshops" to train key people who would facilitate the program locally. The facilitators or, if you will, instructors are the core group for giving workshops. In these workshops, they train teachers, outdoor educators, camp instructors, etc., on how to best use Project WILD. The process, of course, will be on-going, with more "Facilitators' workshops" organized as the need increases.

The role of the CWF will be one of providing administrative services, quality control over the program's use, and the mass production and distribution of the "Activity guides". Administrative services will include:

(1) assistance in the development of individual provincial plans if necessary;

(2) providing a mechanism for sharing ideas and experiences;

(3) a source of guidance and advice as implementation progresses;

(4) an agent to spread the project to other agencies and organizations;

(5) a central record-keeping body to monitor progress, compile annual reports, analyse statistical information, etc.;

(6) setting basic requirements and workshop guidelines;

(7) developing a communications network; and

(8) organizing co-ordinators' conferences.

In addition to the above, CWF will organize an "Initial leadership workshop" for all designated co-ordinators, contact people, and any other key individuals who would be taking an active or passive part in the program. At this initial workshop, participants would be trained in how to introduce the program. These participants would form a core of facilitators nation-wide, and would conduct introductory leadership workshops within their jurisdiction. The timing of this workshop will be announced at a later date.

An experimental pilot project has already been completed in Alberta, and has shown that the proposed plan of action is feasible and effective.

Getting started

The CWF will be imposing a nominal fee of $1000 annually to all participating provinces and territories for an initial 3-year period. In this way, you would have the option of evaluating and renewing involvement from time to time. All participating members will receive 100 free "Activity guides" each year, in addition to the CWF's administrative services. Orders for additional "Activity guides" will be on a cost/recovery basis.

It is our hope that the program may be formally launched soon, but this is dependent on the degree of our success in having the commitments and active participation of all provinces and territories. Once we have your commitments, we may then proceed with organizing an "Initial leadership workshop", later this year, to commence the implementation of Project WILD.

The benefits of having a public that is informed about, and supportive of, any wildlife program are incalculable. By participating in this program, fish and wildlife agencies can ensure that schools, teachers, and outdoor educators will have an additional motivational tool to make youngsters more eager learners. Like any educational process, Project WILD is a long-term investment in the future of Canadian youth. It requires a patient, consistent approach over many years to be truly successful.

The Canadian Wildlife Federation has already invested considerable time, effort, and money to bring Project WILD into Canada, to provide Canadian "Activity guides" and develop a program offered on a Canada-wide basis. We believe that Project WILD has the potential to become a very valuable contribution to conservation education in Canada. Your active participation is vital to its success. We strongly urge your agency to become involved.

And finally, before we adjourn this conference, I would ask that the Federal-Provincial Wildlife Conference acknowledge the value of this program and encourage its implementation throughout Canada during the coming year.

(continued)

Figure 1. CWF flow-chart of implementation proposal

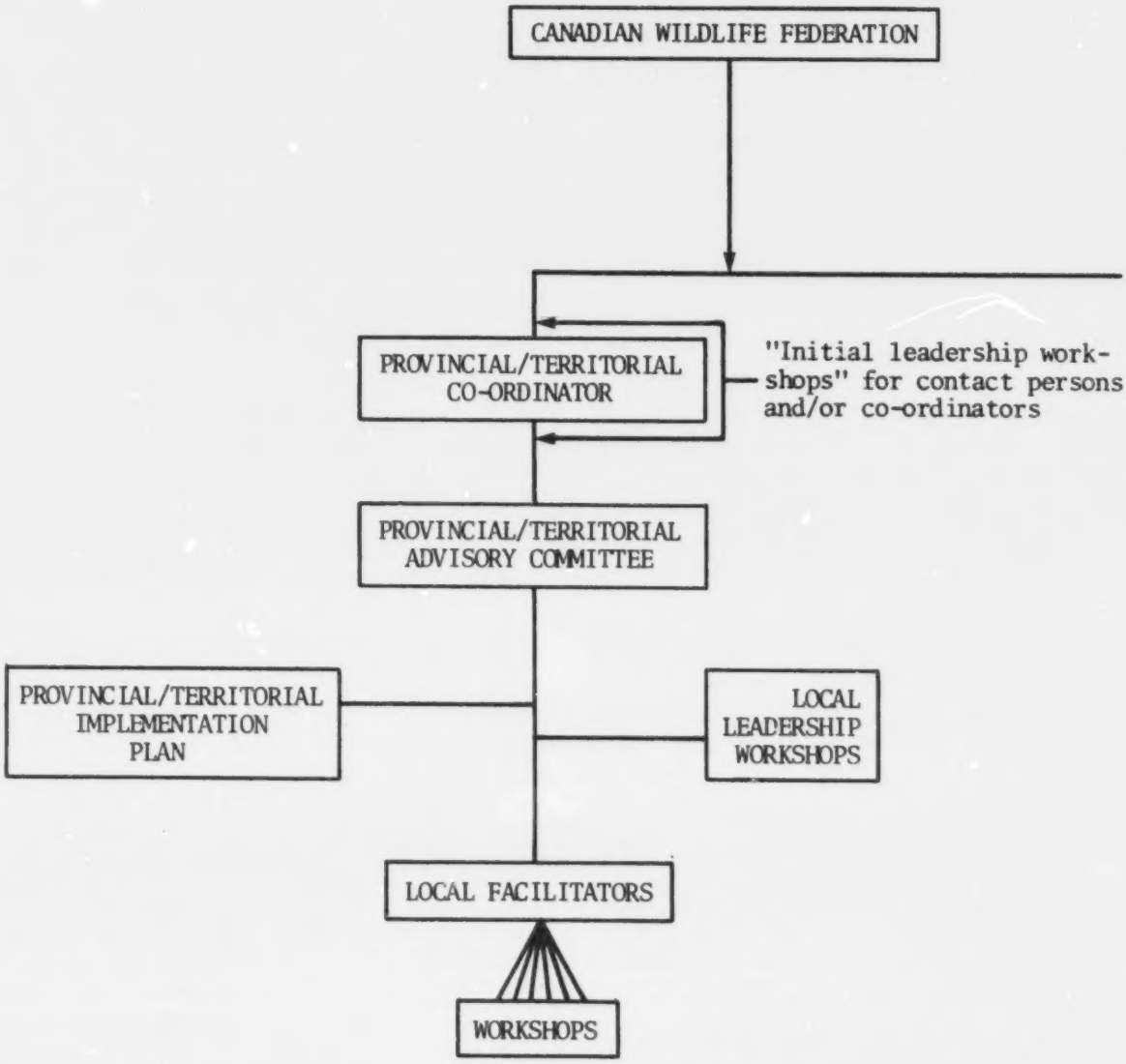
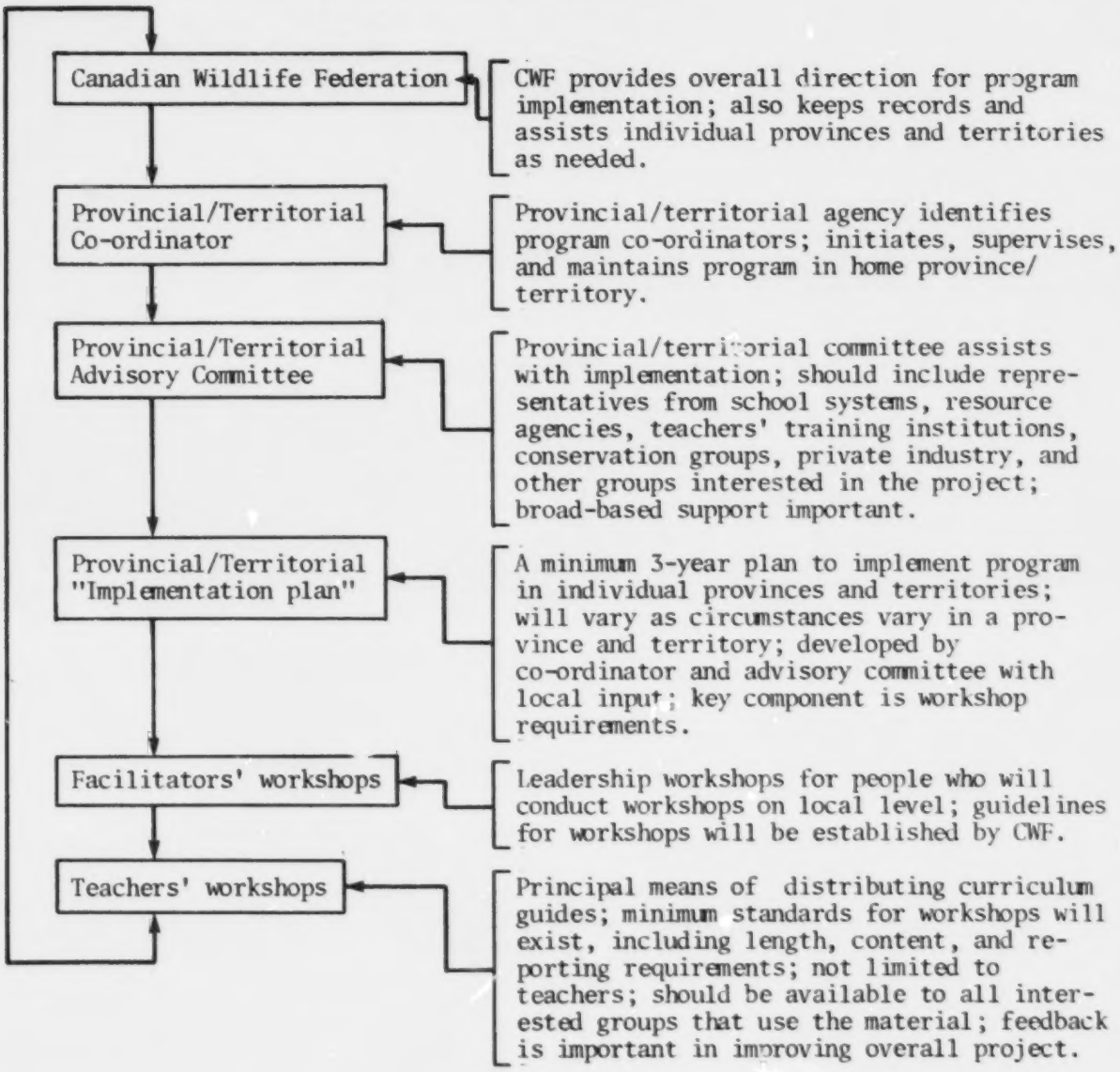


Figure 2. Flow-chart of implementation process


Canadian Wildlife Federation
CWF provides overall direction for program implementation; also keeps records and assists individual provinces and territories as needed.
Provincial/Territorial Co-ordinator
Provincial/territorial agency identifies program co-ordinators; initiates, supervises, and maintains program in home province/ territory.
Provincial/Territorial Advisory Committee
Provincial/territorial committee assists with implementation; should include representatives from school systems, resource agencies, teachers' training institutions, conservation groups, private industry, and other groups interested in the project; broad-based support important.
Provincial/Territorial "Implementation plan"
A minimum 3-year plan to implement program in individual provinces and territories; will vary as circumstances vary in a province and territory; developed by co-ordinator and advisory committee with local input; key component is workshop requirements.
Facilitators' workshops
Leadership workshops for people who will conduct workshops on local level; guidelines for workshops will be established by CWF.
Teachers' workshops
Principal means of distributing curriculum guides; minimum standards for workshops will exist, including length, content, and reporting requirements; not limited to teachers; should be available to all interested groups that use the material; feedback is important in improving overall project.

Report

NATIONAL WILDLIFE WEEK

We are very pleased with the positive reception our 1984 National Wildlife Week (NWW) program received this year from those jurisdictions who participated in this annual event. The comments we received in almost all instances indicated that the topic, "Wetlands and wildlife", was both timely with respect to current priorities within wildlife agencies, and popular with students and teachers.

Our classroom educational kit consisted of a 24-page, four-colour booklet, a teacher's "Activity guide", and a poster announcing the Week. In addition, we included a "Know your ducks" pamphlet published by Ducks Unlimited, as well as flash-cards on various wetlands species and management techniques, again with the co-operation of Ducks Unlimited.

Both the size of the booklet and the format of the teacher's activity guide were departures from previous years. The booklet has been increased from 16 to 24 pages to facilitate more information and visual aids. The "Activity guide" provided a variety of ways in which the material could be used within a classroom setting, as well as "hands-on" lessons in the form of a puzzle and quiz.

Only 85 000 educational kits in the English language were published this year. As a result of difficulties experienced by the Quebec Wildlife Branch over language in our translated manuscript, it was not possible to provide an identical "Wetlands and wildlife" kit in French, because of the lack of sufficient time to produce a revised manuscript. We have, however, held a series of discussions with staff of the Quebec Wildlife Branch, and we are hopeful that this type of situation can be avoided in the future by working together more closely in our effort to meet language requirements. Nevertheless, we did offer to co-operate in whatever way possible, with the result that we supplied 25 000 posters, booklets, pamphlets, and stamps to supplement regional programs.

CWF did provide over 6000 French-language units to other jurisdictions who distribute kits in both official languages. The units consisted of a wetlands pamphlet published by CWS, a letter to teachers, and the "Know your ducks" pamphlet, translated by courtesy of Ducks Unlimited.

Participation

Last year, we raised the point that we were apprehensive about the future, the direction, and the attitude we seem to be encountering in some jurisdictions with respect to participation in the program. These apprehensions were confirmed this year. Orders in some provinces have been cut back further; in others, participation has been cancelled entirely, as is the case with Saskatchewan.

As stated previously, National Wildlife Week is a co-operative program under the jurisdiction of the Federal-Provincial Wildlife Conference. The Canadian Wildlife Federation undertook to prepare, produce, and supply educational kits on behalf of this conference. By not taking full advantage of the program, you are curtailing your own efforts, with the result that less and less wildlife educational material is made available to teachers and students.

In view of the rising impetus of anti-conservation groups, I would argue that more, not less, effort is required on the part of all wildlife agencies and conservation organizations to take every opportunity to ensure that our voice is heard by Canadian youngsters. This is especially true during National Wildlife Week--the single, most important time to promote our work and our message.

Indeed, we will go a step further and state that it is our mutual responsibility to ensure that anti-conservationist sentiments do not influence Canadians in a manner that will jeopardize the future of wildlife conservation efforts in this country. At the moment, groups that persist in promoting attitudes against the conservation ethic are gaining ground, and will continue to increase support for their views unless concerted, unified efforts are initiated by all of us to curb the tide of opinion. Our youth is most susceptible. It is vital that our future decision-makers be properly educated and informed about wildlife and the need to conserve these resources.

Awards program

We are pleased to announce that Gerald Hardisty of Fort Simpson, Northwest Territories, was declared national winner of the poster contest. The Canadian Wildlife Federation had the pleasure last week of presenting an award to Gerald at our 1984 annual meeting in Saskatoon.

Last year, we reported to you changes we have initiated in our award program, which are effective this coming year. Thus far, the contest concept restricts recognition to winning students or to an individual student. No real acknowledgement has been extended to schools or the efforts of teachers involved. This year, our approach has changed in a way that will enhance school/teacher/student participation. Instead of promoting the contest concept, we have changed the event into a "National Wildlife Week achievement" project.

Through the NWW program, teachers are asked to have a poster lesson and submit their posters to respective provincial/territorial wildlife departments. Individual departments will continue to select the most outstanding posters, but also extend recognition to the teacher, school, and student involved. How recognition is extended and what is done with posters, of course, is up to each participating agency. CWF, however, will require at least 10 entries from each province and territory. We will select a national winner and present a trophy to that school, together with a plaque to the student and certificate to the teacher who made it possible. Plaques will be given to runners-up and honourable-mentions. The trophy will be called the "National Wildlife Week achievement award", and will be inscribed and sent each year to the most outstanding school in the country.

It is our hope that, through an award system, provincial and territorial wildlife departments will be encouraged to broaden the scope of activity programs eligible for provincial/territorial and national recognition. We have taken note that at least one province, the Government of Manitoba, has already taken a step in this direction by including a poster and prose contest, a doodle-poster contest, and a "Wildlife conservation youth project" in their sponsored activities. The "Conservation youth project" consists of student projects that benefit wildlife in a direct and meaningful way, and involve improving conditions for wildlife, such as planting shrubs and trees, building nest-boxes, and rejuvenating a wetland.

Report (program highlights)

CANADIAN WILDLIFE SERVICE

B. Tétreault
Director General

I have been asked to give a highlight report on the work of the Canadian Wildlife Service (CWS), illustrating team-work in wildlife management. According to the Oxford Dictionary, team-work means "combined effort" or "organized co-operation". If we follow that definition, practically everything we do in CWS fulfils that role. Team-work means that the ideas of everyone concerned will be considered. It sometimes is a tedious process, but ensures that the output is thoroughly analysed, and better represents everyone's interests and values. Team-work in wildlife management occurs at the national, as well as the international level. I have grouped my remarks under each of those classifications, but of course the two levels inevitably overlap.

National team-work

Federal wildlife policy

In the update report I gave at last year's conference, I mentioned that we were taking a very hard look at the role of the federal government in wildlife management, which will eventually affect our role vis-à-vis the provinces as well. The exercise will probably lead to a "Federal wildlife policy". Intra- and inter-departmental consultations have begun that will eventually lead to the submission of a draft proposal to Cabinet. Following that, provincial and territorial consultations will begin. I hope that we shall be ready to take this policy to Cabinet for federal approval in early 1985.

Wildlife Habitat Canada

An outstanding event that occurred in February was the announcement of Wildlife Habitat Canada as a new foundation dedicated to encourage the retention and stewardship of wildlife habitat throughout Canada. The federal government has provided a $3-million administrative grant to the Foundation, and has also committed the funds obtained from the increase in the migratory game-bird hunting fee. In October 1983, CWS entered into an agreement with the Canadian Wildlife Federation for the services of D. Neave as Wildlife Habitat Canada Co-ordinator. In the past few months a Founding Committee, comprised of representatives of federal, provincial, and non-governmental wildlife organizations, developed a charter and by-laws. A nominating subcommittee has been formed to appoint the first Board of Directors. At the time of writing, a proposal for 1984-85 Wildlife Habitat Canada activities is being developed for consideration at the first Board of Directors' meeting, anticipated in early July 1984.

Mr. Neave and Dr. J. Patterson will present an up-to-date report on Wildlife Habitat Canada to this conference.

"Value of wildlife" study

The survey showing the importance of wildlife to Canadians conducted by Statistics Canada in 1982 and sponsored by federal, provincial, and territorial governmental wildlife agencies and a number of non-governmental groups, revealed that Canadian wildlife resources are highly valuable to the nation. The possibility of building on that knowledge was studied by CWS.

The feasibility of measuring commercial and subsistence wildlife values among native and non-native peoples residing in the northern segments of the provinces was examined under the terms of contracts funded jointly by the wildlife agencies concerned. The feasibility of conducting a joint comprehensive analysis of the national survey on the recreational importance of wildlife to Canadians was also examined. These issues will be addressed at this conference by Jean Cinq-Mars.

Anatum Peregrine recovery project

The first draft of the "Canadian Anatum Peregrine recovery plan" was completed and circulated to provincial and territorial wildlife agencies and to all regional CWS offices for review. A second draft will be completed this fiscal year and will serve as the basis for the "CWS Anatum Peregrine recovery plan".

Research on barren-ground caribou Beverly herd

A 5-year study of the effects of forest fires in the Northwest Territories on the movements and physical condition of the Beverly herd of barren-ground caribou is in its 2nd year. The adequacy of the present forested winter ranges to support the population is being assessed by examining the physical condition of the caribou in early and late winter. The Fort Smith Hunters' and Trappers' Association is co-operating in this aspect of the study. The movements of the herd in relation to burned areas and snow conditions is being monitored monthly throughout the winter. In the summer, the biomass of lichens and other forages is being measured in relation to forest ages and other environmental factors.

The investigation of the causes of death of new-born migratory barren-ground caribou calves of the Beverly herd was completed in June 1983. The work was done on a 5000 km^2 segment of the calving ground of the Beverly caribou herd.

Polar-bear studies

Field observations of the ecological relationships between polar bears, seals, and walruses, sea-ice conditions, and polynyas were concentrated around the Dundas polynya in the early spring. In addition, the use of underwater vocalizations as a tool for studying the distribution and abundance of over-wintering seals in the High Arctic was evaluated.

CWS provided a central co-ordinating point for the storage and retrieval of polar-bear research data, and for planning inter-jurisdictional studies between the federal, provincial, and territorial governments and other agencies. Dr. Ian Stirling is presenting the report of the Administrative Committee for Polar Bear Research and Management to this conference.

Humane trapping

In the field of humane trapping, an Inter-departmental Steering Committee on Humane Trapping has been established to ensure that the efforts of Environment Canada and of the departments of Indian Affairs and Northern Development, External Affairs, and Regional Industrial Expansion are well co-ordinated. Environment Canada will provide $1.5 million over a 4-year period for the research and development of humane trapping devices and methods. The funds will go to the Fur Institute of Canada, and the research will be carried out under the direction of the Institute's Research and Development Committee.

International team-work

"North American waterfowl management plan"

This is an example of team-work at both the national and international levels. A set of broad policies was developed to guide discussions with the United States on the development of the "North American waterfowl management plan". This document was developed by a Task Force of federal, provincial, and territorial representatives, and was circulated to all jurisdictions in March 1984.

A round of preliminary discussions with the United States was initiated in February 1984, in order to ensure that the substantive discussions with the United States to begin in June 1984 would be well organized and would provide a first-draft document by September 1984. This draft, basically a technical/administrative amalgamation of the two national documents, will then serve as the basis for developing and implementing a North American plan.

Protocol

The Protocol to amend the subsistence hunting provisions of the Migratory Birds Convention was signed by Canada and the United States in 1979. It has not been ratified yet by the United States, and so is not in effect. An additional agreement between the two countries to spell out details of how the Protocol will be implemented is now in preparation. We hope that a discussion paper on this agreement will be available for public comment in both countries during 1984. Once this additional agreement is complete, we expect that the United States will ratify the Protocol.

The US-Canada Protocol will be the topic of discussion as a case history in team-work at this conference.

Latin-American program

Now in its 4th year of operation, the program is entering a consolidation phase, as well as continuing previous activities and projects.

CWS, along with the US Fish and Wildlife Service and several of the major conservation organizations, contributed to the "Latin-American wetland evaluation". This 2-year effort to list, classify, and evaluate each country's major wetlands is being co-ordinated by the International Waterfowl Research Bureau (IWRB). The

results are to be presented at the next IWRB meeting, which will be held in Peru in 1985. Other projects funded included the collection of Peregrine Falcon prey items in Peru and Ecuador, and the collection of data on and specimens of shorebirds in Argentina for toxic chemical and genetic analysis. "Letters of arrangement" (informal agreements) have now been signed with Brazil, Venezuela, and Ecuador, and the "Letter" with Peru is in its final stage just prior to signature.

Whooping Crane program

As part of the continuing efforts to protect and conserve the endangered Whooping Crane, CWS carried out aerial surveys in 1983 to monitor cranes and nests in or near Wood Buffalo National Park. At least 24 nests were constructed, surpassing the previous annual record of 19 nests recorded in 1979 and 1980. Three nests were destroyed by predators, 19 eggs were collected from nests with clutches of two, and 21 eggs remained for hatching by wild parents. At least 14 chicks were observed later in the summer in the Wood Buffalo population.

The 19 eggs collected were tested, and 18 with live embryos were flown to Gray's Lake National Wildlife Refuge in Idaho, as part of a co-operative US-Canada foster-parent management program. Of these, 16 were placed in nests of Greater Sandhill Cranes and 2 were shipped to Patuxent Research Center in Maryland. As a result, 11 chicks originating from the Wood Buffalo egg transplant eventually fledged and migrated with their foster sandhill parents to the winter range in New Mexico.

Production in the wild Wood Buffalo population was not as successful. Of the 14 chicks known to hatch, only seven young eventually migrated to Aransas National Wildlife Refuge. Causes of mortality on the breeding grounds were not determined, but predation is suspected.

CITES

Another outstanding example of team-work at the national and international levels is the spirit of co-operation that exists between the Parties to the Convention on International Trade in Endangered Species (CITES). This spirit of co-operation was demonstrated at the Fourth Meeting of the Conference of the Parties to CITES held in Gaborone, Botswana, 19 to 30 April 1983. I had the honour to head the Canadian delegation. Others on the 10-member official Canadian delegation were one Member of Parliament, two CWS officers besides myself, three from the Department of Fisheries and Oceans, and one person each from the departments of Indian and Northern Affairs and External Affairs. The provincial/territorial representative was from the British Columbia Fish and Wildlife Branch. In addition to the official delegation, a total of 12 people participated at the conference on behalf of nine Canadian NGOs, these being the International Primate Protection League (Canada), Inuit Circumpolar Conference, Inuit Tapirisat of Canada, Assembly of First Nations, Canadian Association of Zoological Parks and Aquariums, Canadian Committee for the International Union for the Conservation of Nature and Natural Resources (IUCN), Canadian Sealers' Association, Fur Trade Association of Canada, and the Fur Fashion Council of Canada.

Annual review

Many of the highlights I have reviewed are covered in the 1983-84 "CWS annual review", which is being distributed at this conference. In addition, I note from the agenda that you will be presented with a report on the "Forest/wildlife symposium" with the other reports I have mentioned, which all illustrate team-work.

I have not attempted to give a complete listing of all the ways that CWS co-operates or joins with other agencies, both governmental and non-governmental, thus demonstrating team-work in wildlife management, but I believe the examples I have cited are a good start.

Report (program highlights)

US FISH AND WILDLIFE SERVICE

The United States Fish and Wildlife Service (USFWS) was involved in a number of major resource efforts of interest to Canada from June 1983 to May 1984. Among the highlights discussed below are:

- continued research into the effects and implications of acid precipitation;
- a major re-ordering of national fishery priorities;
- increased funding for such key endangered species programs as Whooping Crane recovery; and
- new efforts in waterfowl management and wetlands protection.

Acid Precipitation

In June 1983, the USFWS and CWS co-authored and presented a paper entitled "Acid stress on forest habitats: Implications for terrestrial wildlife", at the Acid Rain and Forests Resources Conference in Quebec. Participation in the conference provided us with a better perspective of Canada's experience in the area of acid-precipitation impacts.

Personnel from the Columbia National Fishery Research Laboratory, Patuxent Wildlife Research Center, and the Eastern Energy and Land Use Team served on a review committee for the "Canadian-Federal acid rain research program". Reviewers were asked to comment on five aspects of the program:

(1) program direction and control,

(2) funding and staffing,

(3) geographic coverage of studies,

(4) scientific quality, and

(5) long-term monitoring of water quality.

Review comments were submitted to the Royal Society of Canada.

Effects of contaminants on waterbirds and fish in the Great Lakes

The Patuxent Wildlife Research Center will soon begin a study of the effects of industrial contaminants on colonial waterbirds in the Great Lakes region. This will involve co-operative work with CWS and other Canadian biologists. The initial focus will be on Common Tern productivity assessments in relation to contaminant residues in eggs.

Analyses of bird and fish samples from the Great Lakes, to determine occurrence and effects of dioxin and furan residues, are continuing in Fiscal Year (FY) 1984.

Samples from two colonies of Forester's Terns in the Green Bay area revealed reproductive abnormalities associated with high levels of residues of these chemicals. Fish samples from all five Great Lakes had levels ranging from 40 to 1000 parts-per-trillion. Residues were highest in the Tittabawassee River and in a tributary of the Niagara River.

Studies of atmospheric transport of toxaphene into the Great Lakes are continuing, and the Service plans to complete analyses of fish and precipitation samples this year. Profiles of toxaphene-derived residues in Great Lakes fishes will be compared with the residues in precipitation.

The past year has been a period of both achievement and introspection for the Service's "Fishery resource program". The Service redefined its fishery mission in the context of fiscal austerity and a general government-wide re-examination of the federal relationship with the states. The newly defined mission for the remainder of the 1980s stresses involvement in six areas:

(1) restoration of depleted anadromous and Great Lakes fishery resources;

(2) mitigation of fishery resources impaired due to federal development initiatives;

(3) enhancement of currently and potentially endangered and threatened species;

(4) assisting with the management of fishery resources on federal lands;

(5) maintaining a federal leadership role in the fishery resource field generally; and

(6) promoting public awareness of the importance of the nation's fish resources.

These six areas of emphasis are not totally new. Previous activities have related to most of them. Now, however, the Service intends to focus on the resources for which it has the clearest responsibility.

Great Lakes fisheries

In the Great Lakes, strong and long-standing efforts with Canada continued, as the state, provincial, and national governments focused on fishery issues. Committees of the Great Lakes Fishery Commission worked on establishing restoration goals for lake trout. Sea-lamprey control continues to receive high priority, and a fifth hatchery began contributing lake trout for restoration efforts. Research is being conducted to improve the spawning success of lake trout.

Pacific salmon

Salmon populations of the Pacific Northwest may benefit immensely from the fish and wildlife program now being implemented pursuant to the Pacific Northwest Electric Power Planning and Conservation Act. Important streamflow provisions may provide a significant boost to survival of downstream migrants, although the equally important issue of harvest allocation remains as difficult as ever.

Seventeen Service hatcheries and related facilities are involved in salmon production on the Pacific coast. Separately, the Service and the State of Idaho are making substantial progress in constructing hatcheries to contribute to restoration of Lower Snake River salmon and steelhead runs.

Also, in the northwest United States, there was considerable disappointment late in the winter of 1984 when the negotiations on the US-Canada Salmon Interception Treaty broke down. Substantial progress had been made before the talks were suspended. Serious problems will continue to exist in this area and eventually must be resolved.

Garrison Diversion Unit (GDU), ND

The Bureau of Reclamation and the State of North Dakota, in consultation with the USFWS, are currently developing a general plan for managing lands purchased for mitigation in connection with the GDU. Mitigation alternatives and recommendations were developed as part of a joint state/federal effort that resulted in the "Fish and wildlife mitigation and enhancement plan", published in December 1982. The proposed mitigation for Phase I of the GDU is approximately 42 000 acres, though this figure may change when all impact evaluations are completed. In order to address concerns raised by Canada about the Garrison project, US and Canadian officials have engaged in regular consultations. A Joint Technical Committee, established in November 1983, is presently studying various aspects of the mitigation plan, including those relating to fish and wildlife impacts. In regard to the latter, particular attention is being focused on migratory birds, and the potential impacts on the Hudson Bay drainage area of fish, fish diseases, and fish parasites from the Missouri River system.

At a meeting of US and Canadian officials on 25 April 1984 in Washington, DC, it was concluded that the studies were proceeding satisfactorily. The Joint Technical Committee was instructed to continue its evaluation of these matters and report at a future consultation of the parties. The committee is to continue to give particular attention to Canada's technical concerns.

Whooping Crane

Co-operation between the US and Canada continues to play a key role in conservation efforts for the Whooping Crane. This species has become a symbol of the effort to save endangered wildlife in North America. In the spring of 1983, 16 fertile eggs from Wood Buffalo National Park and 12 from the captive flock at Patuxent Wildlife Research Center were transplated to foster-parent Sandhill Cranes at Grays Lake National Wildlife Refuge in Idaho.

The co-operative US-Canadian project to monitor the migration of Whooping Cranes through radio-telemetry continued in 1983. Information from this joint venture, begun in 1981, is providing new insight into spring and fall movement patterns of these birds.

Canadian/United States co-operative Bald Eagle project

In 1983, 22 eagle chicks from Canada were translocated into the United States as part of an effort to restore Bald Eagle populations in the eastern United States.

Six chicks from Nova Scotia and Manitoba went to New Jersey, 12 from Saskatchewan went to Pennsylvania, and Manitoba provided 4 birds for Massachusetts. All 22 of these birds successfully fledged in their "adopted" homeland. The Service is grateful to these agencies for their assistance in recovery of our national symbol.

CITES Co-operation

The USFWS and CWS have worked together closely on technical and administrative matters related to the Convention on International Trade in Endangered Species (CITES). Together we have encouraged Mexico to join the CITES community and, towards that end, have included Mexico in the different North American regional meetings related to CITES. Including input from Mexico on CITES issues of importance to our region is not only proper, but essential to management of our shared wildlife and plant resources.

Porcupine caribou herd

An international management program for the Porcupine caribou herd that will be agreeable to all involved parties continues to be a matter of interest and concern in the US as well as Canada. Formulation of such a program has been delayed in both countries by divergent views over the form it should take. However, recent developments in Canada have stimulated renewed efforts in the US. We are aware, for example, of recent progress towards resolution of native claims issues, and increased movement towards oil and gas exploration and development in the Mackenzie Delta region.

In recent months, the USFWS and the Alaska Department of Fish and Game (ADF&G) have engaged in further discussions about the Porcupine caribou herd, particularly in regard to management arrangements within the US.

We understand that a draft agreement regarding management in Canada is presently being reviewed, and may soon be adopted by the various Canadian agencies and groups concerned with the Porcupine herd. We hope to learn more about this in the near future. In the meantime, we intend to continue our discussions with the State of Alaska, looking forward to the time, hopefully not too far away, when together we can join with our Canadian counterparts in a mutually beneficial program for the conservation and utilization of this valuable natural resource.

"North American waterfowl management plan"

Waterfowl management in North America is an internationally shared responsibility. In recognition of this fact, the USFWS and CWS have embarked on an effort to develop a "North American waterfowl management plan". It is anticipated that Mexico will join in this effort at a later date. The purpose of the plan is to identify the principal management issues from a continental perspective, and establish common goals and appropriate strategies and programs for meeting them. A Steering Committee, composed of members of the CWS/FWS Wildlife Program Review Committee and representatives of provincial and states agencies, has been established to assist with the plan. US and Canadian co-ordinators have been

appointed and will work closely with the Steering Committee, the Flyway Councils, and private conservation organizations to facilitate development of the plan. A mutually acceptable draft plan will be submitted for public review, and a final plan prepared in light of public comments. We consider this to be of the highest priority, and hope to see substantial progress made in 1984.

Evaluating stabilized hunting regulations

The co-operative "US-Canadian stabilized hunting regulations program" continues to make good progress. Under this program, hunting seasons (season length and bag limits) have remained unchanged since the 1979-80 season. Co-operative US-Canadian investigations, focusing on the Mallard, were begun in 1981 to evaluate the relationship between duck populations and duck harvests in the absence of annual changes in season length and bag limits. The program also provides an opportunity to gain further insight into the roles of hunting and non-hunting mortality, and recruitment in regulating duck populations. These investigations have incorporated new studies with on-going programs in both countries. The evaluation will continue through 1985. We believe that this co-operative program will help us develop an improved strategy for duck management in North America.

Black Duck management

Concern for the Black Duck continues at a high level in the US. The continental population of this species has declined substantially during the last 25 years. Based on winter counts, the population is currently about 40% below that for the mid 1960s.

In spite of intensive investigation, a clear understanding of the factors responsible for the decline has not yet fully emerged. This has been, and continues to be, a subject of public debate and disagreement in the US. Much of the debate has centred on the role of hunting mortality, which some observers believe to be the principal factor involved. Yet, the most recent analyses of Black Duck population data fail to demonstrate a simple, direct relationship between the harvest levels and population status.

In order to improve our understanding of the Black Duck situation, we believe that other factors such as the eastward expansion of the Mallard population, must be given more attention. Mallards now occupy major portions of the Black Duck range, and appear to be extending further into it with each passing year. At the same time, Black Ducks are decreasing and their centre of abundance is shifting to the east. This situation is further complicated by hybridization between Black Ducks and Mallards.

The Black Duck situation appears to be far more complicated than was formerly thought, and it is unlikely that it can be understood by focusing solely on one factor, such as hunting mortality. Nevertheless, we are not yet in a position to entirely discount the possibility that hunting mortality may be influencing the status of some segments of the population. For this reason, additional restrictions on the harvest of Black Ducks were implemented in the US during the past hunting season. We intend to continue these restrictions and evaluate the results for the next 3-5 years. We look forward to similar actions in Canada in order to strengthen the evaluation. In the meantime, the USFWS plans to work

in close co-operation with CWS in exploring other facets of this complicated problem.

Subsistence hunting of migratory birds

We have reported at previous gatherings of the Federal-Provincial Wildlife Conference on the status in the US of the Protocol to amend the subsistence hunting provision of the US/Canada Migratory Bird Treaty. Ratification of the amendment has been deferred pending resolution of concerns about how subsistence hunting would be managed under the new treaty provisions.

It has been proposed to develop an agreement with Canada that would address in more detail how the Protocol would be interpreted and implemented in the two countries. The response to this proposal has been generally favourable, with the proviso that the agreement must be binding on both countries. We have been advised that this can be done by an exchange of formal diplomatic notes. The USFWS favours this approach, and we hope soon to begin discussions with CWS to further explore the details of an agreement.

Wetland legislation

Progress continues to be made in the US Congress to develop more comprehensive wetlands protection legislation, and to enhance or develop new means of financing wetlands protection programs. Three major wetlands conservation bills are currently under consideration in the Congress. Though there are key differences in the three bills, all provide for:

- an extension of the Wetlands Loan Act for 10 years;

- authority to impose refuge entrance fees, with receipts to go to the Migratory Bird Conservation Fund;

- an increase in the price of the duck stamp from $7.50 to $15.00.

While awaiting legislative action on these initiatives, the Interior Department is seeking increased budget authority for FY 1985 to continue our commitment to wetlands conservation. The department has requested additional funds to supplement revenues from duck stamp sales that would permit expanded federal and state protection of wetlands, a study of the effect of federal subsidies on wetlands, and completion of the national wetland inventory.

Report

STATUS OF WATERFOWL IN CANADA, 1984

F.G. Cooch and S. Wendt
Canadian Wildlife Service

Summary

Atlantic region - No indication of departure from the normal state of breeding habitat and breeding waterfowl numbers at this time.

Quebec - Breeding season slightly delayed from normal. Spring runoff low in many areas. Water conditions now good for waterfowl breeding throughout most of the region.

Ontario - Breeding initiation times normal in South, perhaps somewhat advanced in North. Early conditions in South tending towards dry in some areas, but later precipitation restored water levels. Breeding populations probably normal. In northern Ontario, Mallard numbers seem to be increased by birds that may have foregone breeding in the Prairies.

Prairie region - Habitat conditions, and their attractiveness to breeding ducks, are poor throughout the Prairies. From Winnipeg to the Rockies, the land was very dry through the period of breeding initiation. Record low water levels are reported in areas of southern Alberta and southwest Saskatchewan. Dry conditions extend to the parkland areas north of the Prairies. The continued dry conditions must be assessed together with land-use practices that have allowed changes to drainage in the recent dry years. As a result, much of the limited water supply now available is in ditches or dugouts with reduced usefulness to breeding waterfowl. In much of the area, 1979 was the last year of good habitat conditions for breeding waterfowl. (More details on results from on-going surveys are provided below.)

Pacific region - Breeding initiation was somewhat advanced in British Columbia this year. Habitat conditions are good and breeding populations are normal.

Northern goose-breeding areas - Snow Geese arrived early at Pond Inlet this year. Detailed assessment of Snow Goose breeding habitat will not be available until late June, but it seems that snow cover is slight and that breeding should be good. Most goose populations are in relatively good condition going into this breeding season.

Last year's hunting permit sales

Hunting permit sales nationwide declined again in 1983-84, continuing the downward trend that started in 1979. The total permit sales, by zone within province, are shown in Table 1.

Table 1. Hunting permit sales

Province		1983	1982
Nfld.	01	28 335	28 209
	02	2 642	3 006
PEI		5 898	5 461
NS	01	9 064	9 071
	02	4 404	4 657
NB	01	8 621	8 835
	02	4 137	3 924
Que.	01	52 859	57 008
	02	14 841	15 842
Ont.	01	38 194	39 420
	02	76 001	78 680
	03	25 374	26 336
Man.	01	33 304	37 678
	02	7 139	7 395
Sask.	01	17 854	17 974
	02	8 251	8 453
	03	19 278	20 809
Alta.	01	25 927	27 780
	02	35 815	37 188
BC	01	10 711	11 562
	02	13 459	14 960
NWT		750	800
Yukon		474	572
		443 332	465 820

Prairie Region waterfowl survey results

Some highlights of on-going co-operative waterfowl surveys are show in Table 2.

Table 2. Mallard breeding populations (in thousands)

Prov/state	Stratum	1984	1983	1982	1981
Man.	36-40	183.7	337.2	389.4	350.9
	24	139.7	250.3	275.0	445.6
	25	47.2	63.0	87.5	98.8
Sask.	31-35	1396.3	1713.7	1944.4	1504.6
	21	103.0	100.7	134.7	110.5
	22	77.0	132.4	135.8	138.7
	23	145.2	120.6	162.5	230.8
Alta. (south)	-	667.0	845.5	765.8	947.0
Mont.	-	189.4	230.0	323.5	245.8
N.Dak.	-	548.9	398.9	466.5	308.6
S.Dak.	-	334.4	314.9	291.6	186.7

Those readers who are not familiar with the stratum designation from the "Co-operative breeding group surveys" should be aware that the results shown in Table 2 cover all of the surveyed area except for the most northern areas, from which results are not yet available.

The results shown in Table 2 are preliminary. The evidence from surveys completed so far this year indicates some Mallard displacement from the Canadian Prairies south to the eastern Dakotas and Minnesota and east to northern Ontario. The displaced birds will have low breeding success.

New Black Duck regulations

New restrictive regulations for Black Duck hunters will be in place this fall. CWS has produced a pamphlet that explains the basis for the new regulations to hunters. This pamphlet will be available at permit sale locations in eastern Canada. The Biometrics Section of CWS is presently advising on methodology for the sampling of Black Duck breeding populations by co-ordinated aerial surveys. Breeding habitat conditions through most of the Black Duck range are satisfactory this year.

Recent midwinter counts of Black Ducks

The US Fish and Wildlife Service co-ordinates surveys of waterfowl in midwinter. The results have been obtained for Black Ducks in the Atlantic Flyway in recent years (Table 3).

Table 3. Black Ducks

1979	264 200
1980	221 000
1981	301 400
1982	217 600
1983	170 200
1984	165 700

Migratory game-bird harvest

Preliminary results of the national surveys of migratory game-bird harvest are now available. There are still an estimated 1000 questionnaires to be added for a complete analysis, so the final results may differ somewhat. The break-down of harvest by province is shown in Table 4.

For some waterfowl species, the status must be given as "unknown". Among these are Cinnamon Teal and eastern populations of Barrow's Goldeneye and Harlequin Duck.

Table 4. Preliminary results of game-bird harvest surveys

Province	Ducks	Can. Geese	Other Geese	Snipe	Woodcock
Nfld.	114 637	14 131	--	15 959	--
PEI	36 842	14 671	--	207	784
NS	115 566	10 087	40	2 102	3 386
NB	81 421	6 506	1 514	1 606	7 748
Que.	452 276	32 284	49 817	24 598	37 164
Ont.	904 405	62 663	10 775	8 351	56 690
Man.	296 838	75 016	83 023	1 586	--
Sask.	384 099	120 445	87 240	1 145	--
Alta.	506 832	94 854	23 817	8 803	--
BC	195 394	13 533	1 097	3 414	--
NWT	13 110	1 429	1 508	--	--
Yukon	2 768	249	106	--	--
Total	3 104 188	444 187	260 618	67 781	105 772

Report

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES OF WILD FAUNA AND FLORA (CITES)

The reputation of CITES, as being a leading environmental agreement in the world today, continued to gain strength during 1983. Of particular importance was the ratification of Belgium, a leading nation in the trade of wildlife and wildlife products. By the end of March 1984, 83 countries were enforcing the requirements of the Convention.

CITES is a leading international agreement not merely because of the level of participation by the world's nations, but more importantly because of the spirit of co-operation that exists between the Parties. This co-operation was clearly evident among the 59 Parties that attended the 4th Meeting of the Conference of the Parties to CITES held in Gaborone, Botswana, 19 to 30 April 1983. In addition to the friendly relations between the countries, the meeting was highly successful because of a somewhat unique feature of the Convention, which allows for the participation of any groups having an interest in CITES. There is no doubt that the three United Nations or international governmental organizations, three non-party States, and 68 non-governmental organizations in attendance at the conference contributed much to the meeting.

The 10-member official Canadian delegation at Gaborone was the largest ever, consisting of one Member of Parliament, three CWS officers, including the Director General as Head of Delegation, three from the Department of Fisheries and Oceans, and one person each from the Department of Indian and Northern Affairs and the Department of External Affairs. The provincial/territorial representative was from the British Columbia Fish and Wildlife Branch. In addition to the official delegation, a total of 12 people participated at the conference on behalf of nine Canadian NGOs, being the International Primate Protection League (Canada), Inuit Circumpolar Conference, Inuit Tapirisat of Canada, Assembly of First Nations, Canadian Association of Zoological Parks and Aquariums, Canadian Committee for the International Union for the Conservation of Nature and Natural Resources, Canadian Sealers Association, Fur Trade Association of Canada, and Fur Fashion Council of Canada.

The large contingent of Canadians at the Botswana conference was the result of two separate proposals, one submitted by the Gambia and the other by the Federal Republic of Germany. The Gambian proposal was an attempt to broaden the interpretation of the CITES agreement, so as to prohibit trade in CITES-regulated specimens if such specimens had been obtained by the use of cruel and painful trapping devices including, for example, the leg-hold trap. This draft resolution was defeated in a plenary session of the conference by 30 votes against and 6 for, mainly because the parties did not consider that the resolution fell within the scope of the Convention. The Federal Republic of Germany proposed that all phocid (earless) seals not already included in Appendix I be listed in Appendix II. This proposal was defeated because the Parties felt that it was not based on scientific evidence as required by CITES, and it seemed to be a politically motivated proposal.

Some changes

Conferencesof the Parties, held biennially, represent the primary opportunity for the Parties to amend the Appendices, the list of controlled species. Of 10 Canadian proposals, the following five species were deleted from the Appendices:

(1) Lake sturgeon (Acipenser fulvescens) from Appendix II,

(2) Longjaw cisco (Coregonus alpenae) from Appendix I,

(3) Blue walleye (Stizostedion vitreum glaucum) from Appendix I,

(4) Northern swift fox (Vulpes velox hebes) from Appendix I,

(5) Bighorn sheep (Ovis canadensis - Canadian population) from Appendix II.

Although the other five proposals concerning the shortnose sturgeon (Acipenser brevirostrum) and the Canadian populations of brown bear (Ursus arctos), wolf (Canis lupus), lynx (Lynx canadensis), and bobcat (Lynx rufus) were withdrawn, it was clearly indicated to the Parties that Canadian populations of these species were biologically sound, and that their listing was solely for reasons of similarity in appearance to species that were threatened or endangered in other countries.

On 30 April 1983, in Gaborone, the 2nd Extraordinary Meeting of the Conference of the Parties was held. The Parties considered, and eventually approved by a vote of 27 to 9, an amendment to Article XXI of the CITES agreement allowing "regional economic integration organizations constituted by sovereign States" to accede to CITES. The amendment cannot enter into force until 60 days after two-thirds, in other words 54, of the States party to CITES at the time of the Extraordinary Meeting have ratified or accepted the amendment. Once it becomes effective, the amendment will allow an organization like the European Economic Community (EEC) to become a party to the Convention.

During November 1983, three meetings were held to discuss the Botswana conference, how to implement its various resolutions, possible submissions for the next conference, and the overall direction of CITES both nationally and internationally. Canada, as a Vice-chairman, attended a CITES Standing Committee Meeting in Gland, Switzerland, 1 to 4 November. On 14 and 15 November, in Hull, Quebec, a North American Regional Meeting was held, attended mainly by officials from CWS and the US Fish and Wildlife Service. Immediately following, the Canadian CITES Management and Scientific Authorities gathered in Hull on 16 and 17 November.

Information and training

Informing people about CITES is the primary activity of CWS's CITES staff. The many people needing information on CITES represent a wide cross-section of the Canadian and international public. Thousands of written and telephoned requests are received each year from people in many walks of life: customs brokers, freight forwarders, zoo and aquarium people, and pet traders; orchid and cacti importers and exporters, business men and women, tourists, and Canadian and foreign diplomats; provincial and territorial management and scientific

authorities, Customs and Royal Canadian Mounted Police (RCMP) officers, foreign wildlife officials, the international CITES Secretariat, and of course other federal departments, such as Fisheries and Oceans, External Affairs, and Agriculture Canada.

In response to the need for training the people responsible for the enforcement of the CITES regulations, seminars on the Convention have been given to Customs and RCMP officers since 1981. The CITES training program continued during 1983, and by the end of the year 31 seminars involving approximately 480 Customs and RCMP officers had been presented. In addition to sessions held in Ottawa and Rigaud, Quebec, as part of formal courses for RCMP and Customs, seminars were held "in the field" in Coutts, Calgary, and Edmonton, Alta.; Yarmouth and Halifax, NS; and Montreal, Regina, and Toronto. By the end of 1983, about 1280 enforcement officers had attended over 110 training seminars since the program began.

To the extent possible, information sessions are held at the request of other groups who wish more complete details on CITES. In March 1983, a talk was given to some 40 Conservation Officers of the Ontario Ministry of Natural Resources in Cornwall. In addition, two presentations were made to the Canadian Association of Zoological Parks and Aquariums during their annual meeting in Victoria, BC on 17 September 1983. However, perhaps the highlight of the year was the 2-week CITES workshop in Washington, DC in August. The workshop was a gathering of CITES officials from Central and South American countries, a number of Caribbean nations, the US Fish and Wildlife Service, and CWS.

Canadian participants spoke on three occasions, once describing the Canadian political set-up, another time outlining the public awareness program, and on the third occasion at a half-day session explaining in detail the legal aspects of the application of CITES in Canada. The workshop was attended by people from 23 nations.

During 1983, a new component was added to the CITES public awareness program. Already in place are a pamphlet entitled "Noah didn't need a permit, what about you?" and a series of television announcements to warn the public of the restrictions imposed by CITES. In addition, a number of brochures distributed by Customs and Excise, Revenue Canada, External Affairs, and Agriculture Canada all contain notices on CITES.

In June and July, exhibits developed by CWS in conjunction with the National Museum of Natural Sciences were set up in the international departure lounges of airports at Mirabel, Toronto (Terminal II), and Vancouver. Called "Souvenirs of extinction", the exhibits explain the consequences to endangered species of purchasing living specimens, or their parts and products. In particular, trade in elephant ivory, crocodile and alligator products, parrots, spotted cats, and marine turtles is highlighted.

Permits

In 1983, federal, provincial, and territorial CITES authorities issued 3476 endangered species export permits, mainly for Appendix II species. During the same period, the federal authority approved 55 endangered species import permits for Appendix I specimens, 39 transit certificates primarily for temporary entry of circus animals, and 48 scientific certificates for the non-commercial loan, donation, or exchange between scientists of prepared scientific specimens.

Report

COMMITTEE ON THE STATUS OF ENDANGERED WILDLIFE IN CANADA

J.A. Keith
Chairman

This is the seventh report of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) to the Federal-Provincial Wildlife Conference (FPWC). COSEWIC is mandated by this conference to determine the status in Canada of wild species whose future may be in doubt, and to release the information upon which the declaration of status is based.

Classification actions

COSEWIC, in its prime role, assigned status to 24 species and populations on 4 April 1984. Status was previously (10 November 1983) declared on two additional species by the Executive Committee, acting on instructions from members at the 1983 General Meeting. This brought the number of status determinations for the year to a total of 26, the largest number since COSEWIC began work.

Committee decisions, based on status reports and agreed status definition, were as follows:

Rare:	Green dragon (*Arisaema draconitium*)
	Shumard oak (*Quercus shumardii*)
	Hop tree (*Ptelea trifoliata*)
	Prothonotary Warbler
	Eastern Bluebird
	Barn Owl
	Western woodland caribou (mainland west of James Bay)
	Queen Charlotte Islands ermine
Threatened:	Plymouth gentian (*Sabatia kennedyana*)
	Water willow (*Justicia americana*)
	Giant helleborine (*Epipactis gigantea*)
	Mosquito fern (*Azolla mexicana*)
	Henslow's Sparrow
	Maritime woodland caribou (south of the St. Lawrence)
	Shorthead sculpin
Endangered:	Southern maidenhair fern (*Adiantum capillus-veneris*)
	Pink coreopsis (*Coreopsis rosea*)
	Cucumber tree (*Magnolia acuminata*)
	Pink milkwort (*Polygala incarnata*)
	Acadian whitefish
Not in any category:	False mermaid (*Floerkea proserpinacoides*)
	Bald Eagle
	Northeastern woodland caribou (east of James Bay, north of the St. Lawrence
	Newfoundland woodland caribou (Newfoundland)
	Mountain beaver

(cont'd)

Extinct: Dawson woodland caribou (Queen Charlotte Islands)

The additions this year bring the total of COSEWIC actions to 90 species, distributed as follows:

Table 1. Classifications

Category	Birds	Mammals (terrestrial)	Mammals (marine)	Fish	Plants	Amphibians, reptiles	Total
Rare	12	7	1	8	4	-	32
Threatened	6	3	1	1	8	-	19
Endangered	5	4	3	1	7	1	21
Extirpated	-	2	-	-	-	-	2
Extinct	-	1	-	-	-	-	1
Not in any category	6	7	-	1	1	-	15
Total	29	24	5	11	20	1	90

A composite list of species dealt with in Table 1 appears in Appendix I.

Other committee highlights

(1) The sub-committee chairmen have obtained what is needed to complete the first major review of mammals, birds, amphibians, and reptiles, fish and plants at risk in Canada. They estimate that 60 status reports are needed at a cost of $120 000. These could be completed within 3 years. After that, the requirement for status-report funding would drop to a maintenance level of about $15 000/year for the next 7 years, mainly for updates of existing status reports. These estimates give a very useful perspective of the scale of work still to be done. Considering the momentum of status report production now generated by the sub-committee chairmen, every effort should be made by members of the FPWC to provide $120 000 during the next 3 years.

(2) COSEWIC is concluding its third financial phase. Originally, member agencies provided status reports to COSEWIC from their own staff authors, or through contracts that they funded. As this arrangement faltered, because of economic pressures, World Wildlife Fund (WWF) Canada obtained donor funding totalling $49 500 from the Richard Ivey Foundation, spread equally over 3 years. Monte Hummel, Executive Director of WWF Canada, then committed WWF Canada to supplying a new 3-year funding program from its own resources, based on matching the dollars spent by jurisdictions up to specified limits of $20 000, $15 000, and $10 000, now in its final year. No funding for on-going production of status reports has yet been identified. A further initiative, again through the good offices of WWF Canada, to obtain outside funding for COSEWIC work has to date not been successful.

(3) COSEWIC notes with gratitude that the productivity of the Plants Sub-committee under Dr. Erick Haber, Botany Division, National Museum of Natural Sciences, resulted in 12 status determinations, and formed the basis of this year's all-time committee record of 26 new status assignments, twice the yearly average to date.

(4) COSEWIC notes with regret the resignation of Dr. Nicholas Novakowski as Chairman of the Mammals Sub-committee. Nick had retired from the federal public service in 1983. Dr. Novakowski is well known to COSEWIC members. He was active in the formative stages of COSEWIC, was its first Secretary, and the first Chairman of the Sub-committee on Mammals. In related endangered species work with the Convention on International Trade in Endangered Species (CITES), Nick was the first Scientific Authority for Canada.

Nick spent much of his professional career directly or indirectly connected with endangered wildlife, both the species and their habitat requirements. He identified a remnant band of Wood bison, previously thought to be extinct, devised and initiated the now-successful recovery program, and has completed a manuscript for a monograph on Wood bison. He worked in the field and authored the first of the CWS Report Series, on the Whooping Crane. He has been actively involved with other endangered species recovery programs, on Swift fox and Black-footed ferret, and has promoted and worked towards a "Great Plains rehabilitation program".

COSEWIC is pleased to recognize and draw attention to the contributions of Dr. Novakowski to the conservation of endangered wildlife in Canada.

(5) Dr. Merlin Shoesmith of Winnipeg, who has represented Manitoba on COSEWIC since early meetings, has agreed to serve as Chairman of the Sub-committee on Mammals.

(6) COSEWIC is pleased to note and draws attention to the recent establishment of a computerized data facility for COSEWIC-listed species, through staff efforts, good offices, and funding by Fisheries and Oceans Canada, National Museum of Natural Sciences, and Environment Canada. Dr. Robert Campbell, DFO, and Dr. Don McAllister, NMC, were instrumental.

(7) COSEWIC is likewise pleased to note and draws attention to the imminent publication in the Canadian Field Naturalist of COSEWIC status report manuscripts in edited form. Dr. Francis Cook, NMC, and Dr. Robert Campbell, DFO, were instrumental. This is a promising way of making the state-of-the-art status reports known to a wide audience.

(8) Following a very useful discussion at the April 1984 general meeting, led by Ontario, COSEWIC will produce a procedures manual, describing how it operates. In addition, as part of the clarification of existing procedures, the Executive Committee will cease to exist. Instead, sub-committee chairmen will meet from time to time.

(cont'd)

Appendix 1

List of species with designated status as of April 1984

Birds

Species	Status
White Pelican	Threatened
Double-crested Cormorant	NIAC*
Trumpeter Swan	Rare
Ferruginous Hawk	Threatened
Gyrfalcon	NIAC
Peregrine Falcon:	
Pealei	Rare
Tundrius	Threatened
Anatum	Endangered
Greater Prairie Chicken	Endangered
Whooping Crane	Endangered
Greater Sandhill Crane	NIAC
Piping Plover	Threatened
Eskimo Curlew	Endangered
Ivory Gull	Rare
Caspian Tern	Rare
Burrowing Owl	Threatened
Great Gray Owl	Rare
Kirtland's Warbler	Endangered
Ipswich Sparrow	Rare
Ross' Gull	Rare
Red-necked Grebe	NIAC
Prairie Falcon	NIAC
Red-shouldered Hawk	Rare
Cooper's Hawk	Rare
Prothonotary Warbler	Rare
Henslow's Sparrow	Threatened
Eastern Bluebird	Rare
Barn Owl	Rare
Bald Eagle	NIAC

Mammals

Species	Status
Eastern mole	Rare
Vancouver Island marmot	Endangered
Black-tailed prairie dog	Rare
Fox squirrel	NIAC
Pocket gopher	Rare
Right whale	Endangered
Bowhead whale	Endangered
Swift fox	Extirpated
Grey fox	Rare
Grizzly bear	NIAC

(cont'd)

Mammals (cont'd)

Species	Status
Newfoundland marten	NIAC
Black-footed ferret	Extirpated
Badger	NIAC
Sea otter	Endangered
Eastern cougar	Endangered
Peary caribou	Threatened
Wood bison	Endangered
Wolverine	Rare
Long-tailed weasel (Prairies)	Threatened
Humpback whale	Threatened
St. Lawrence beluga	Endangered
Blue whale	Rare
Mountain beaver	NIAC
Queen Charlotte Islands ermine	Rare
Woodland caribou: (by population)	
Dawson woodland caribou	Extinct
Western woodland caribou	Rare
Northeastern woodland caribou	NIAC
Maritime woodland caribou	Threatened
Newfoundland woodland caribou	NIAC

Plants

Species	Status
Furbish lousewort (Pedicularis furbishiae)	Endangered
Small white lady slipper (Cypripedium candidum)	Endangered
Willow (Salix planifolia tyrrellii)	Threatened
Thrift (Armeria maritima interior)	Threatened
Small whorled pogonia (Isotria medeoloides)	Endangered
Kentucky coffee tree (Gymnocladus dioica)	Threatened
Blue ash (Fraxinus quadrangulata)	Threatened
Broad beech fern (Phegopteris hexagonaptera)	Rare
Southern maidenhair fern (Adiantum capillus-veneris)	Endangered
Green Dragon (Arisaema draconitium)	Rare
Plymouth gentian (Sabatia kennedyana)	Threatened
Pink coreopsis (Coreopsis rosea)	Endangered
False mermaid (Floerkea proserpinacoides)	NIAC
American water-willow (Justicia americana)	Threatened
Shumard oak (Quercus shumardii)	Rare
Hop tree (Ptelea trifoliata)	Rare
Giant helleborine (Epipactis gigantea)	Threatened
Cucumber tree (Magnolia acuminata)	Endangered
Pink milkwort (Polygala incarnata)	Endangered
Mosquito fern (Azolla mexicana)	Threatened

(cont'd)

Fish

Species	Status
Shortnose sturgeon	Rare
Speckled dace	Rare
Giant stickleback	Rare
Blueback herring	NIAC
Spotted gar	Rare
Spotted sucker	Rare
Silver shiner	Rare
River redhorse	Rare
Charlotte unarmoured stickleback	Rare
Acadian whitefish	Endangered
Shorthead sculpin	Threatened

Reptiles and amphibians

Species	Status
Leatherback turtle	Endangered

* Not in any category.

Report

POLAR BEAR ADMINISTRATIVE COMMITTEE

Ian Stirling
Canadian Wildlife Service

The 1984 meeting was held on 17 June. Representatives from Quebec, Yukon, Newfoundland, and the Department of Indian and Northern Affairs (DINA) were not present.

The minutes of the Polar Bear Technical Committee were circulated beforehand, and indicated that a wide range of research and management recommendations were dealt with. Research on deterrents for polar bears has been productive. Tests with rubber bullets have been quite promising. This project is expected to continue for another 2 years. Specimens are being collected for baseline studies of toxic chemicals in several different areas of the Arctic.

The Technical Committee and a number of invited specialists from Canada, USA, and Norway also held a workshop on modelling polar-bear populations. Several analysis packages have been agreed upon and will be circulated to all the jurisdictions to improve standardization of data handling. The need to develop low-cost indices of population state and reproductive parameters was recognized as a priority.

Several modifications were made to the borders of the present polar-bear management zones in order to reflect the results of research conducted to date. It was agreed that there is a need to develop some principles for the division of quotas in shared populations. The Administrative Committee is recommending that the US and Canada meet to co-ordinate the management of, and setting quotas for, the polar-bear population they share in the southern Beaufort Sea.

The status of the polar bear under COSEWIC is still under review, but will probably be NIAC (Not in any category). Some recent experiments using Telazol to immobilize polar bears were very successful. The drug is not commercially available yet, but promises to be extremely valuable for bear research when it is.

The Wildlife Ministers' meeting last September supported a co-ordinated research program on the population ecology of polar bears in Foxe Basin, Hudson Strait, Hudson Bay, and James Bay. Agencies participating at present include the Northwest Territories Wildlife Service, CWS, Ontario Wildlife Branch, and Manitoba Wildlife Branch. It was agreed to investigate the development of a co-operative agreement for the life of the project.

The Northern Oil and Gas Assessment Program (NOGAP) has been approved for marine areas of the Beaufort Sea and the Parry Channel. Population and management studies are planned by the NWT Wildlife Service, Yukon Wildlife Branch, and CWS in co-operation with the USFWS.

An oil-spill contingency plan for polar bears has been developed and copies have been circulated to all jurisdictions.

Report

CANADIAN COMMITTEE ON UNGULATE MANAGEMENT

D.A. Hagan

The purpose of the Canadian Committee on Ungulate Management (CCUM) is for ungulate managers to exchange information on items of common interest. The first item we discussed at our recent meeting was supplementary feeding of ungulates, and specifically deer. Howard Smith of Ontario made a presentation to the group and discussed some of the problems that we were encountering, and some of the research that we were building around the supplementary feeding process. We hope this will be of value to ungulate managers in the near future.

The matter of predator control was also discussed, and the group has been asked to submit a list of principles to the Wildlife Directors.

The discussion of communications between biologists and wildlifer users was deferred, and the exchange of information on research projects was begun and will continue as other jurisdictions submit their information throughout the year.

We also discussed game-farming legislation, which is a topic that is becoming of greater interest, particularly in the West. Policies with regard to game-farming perceptions and opinions were reviewed. We will be collecting information from jurisdictions and submitting a collated version of this information again to the Wildlife Directors, to whom we report.

We also began discussion of big-game harvest control techniques, and this led to a discussion of various programs, including Ontario's moose management program, corridor refuges along public roads (which is a technique being applied by a western province), and "supplemented deterioration" of logging roads.

Reports

SUMMARY OF DISCUSSION ON PROGRAM HIGHLIGHTS

K.A. Brynaert (Canadian Wildlife Federation) said that, with respect to the topic for the 1985 National Wildlife Week program, the CWF recommended "Wildlife conservation ethics: The key to responsible stewardship", in view of the overriding prevalence in recent years of misinformation on what were the goals and objectives of wildlife conservation. They were seriously concerned about the degree to which such information, considered to be anti-conservation, had permeated and influenced the educational system in Canada. CWF felt strongly that what was needed was a clear statement about wildlife conservation: its philosophy, the standards required to achieve the goals of conservation, and what was expected from people respecting attitudes and actions towards natural renewable resources. If their recommendation was acceptable, their goal in preparing the 1985 package for National Wildlife Week would be to create a kit that would, in simple, easily understandable language, define a wildlife conservation ethic. The CWF emphasized "ethic" because of its inherent implication in terms of living up to a standard and following a code on the part of an individual student.

As 1985 also marked the Parks Centennial, he continued, they would like to include an appropriate reference to the role of parks in the protection and conservation of wildlife and habitat in tribute to this event. Next year had been designated as the "International Year of the Youth". They would consider it appropriate also to highlight this theme in their package, since the primary audience for their National Wildlife Week program was young Canadians. Expanding on the "International Year of the Youth" program, he said that each month of the year had been designated to a scientific endeavour. April had been designated to wildlife. The Canadian Youth Science Foundation had asked the CWF to urge their member-organizations to participate in recommending programs and projects that students could undertake, to provide expert judges to evaluate the programs and projects that those children produced, and to offer recognition and prizes where appropriate to acknowledge some of their accomplishments. He hoped that it would have the full support of the conference body to encourage that activity in April of next year.

B. Tétreault (Canadian Wildlife Service) believed that the proposed subject was of interest. He said he was sure that they supported the approach, but wondered what CWF's target was in terms of audience, and how they were going to adapt this target to their various audiences, if it was different in different sectors.

K.A. Brynaert replied that he did not think there was any problem in directing it to the audience. They knew the age level. His own children understood that there was such a thing as ethics at 7/8 years, and indeed that was the time to establish ethics. He thought that it would be a very interesting topic and a very challenging one to present at that age level. It also had the potential for what he had hoped for a number of years, and that was that they could expand Wildlife Week initiatives beyond just a school package. He believed that Rich Goulden had encouraged this 2 years ago, and indeed Manitoba had taken the initiative. Now, when they got into the adult area, if anyone wanted to take that one on, ethics became again a very interesting topic to deal with. (See Recommendation No. 9.)

M. Hummel (World Wildlife Fund Canada) said that he had missed the report from British Columbia, and was curious about what might be said about predator control in this year of public interest in the matter in that province. When it was mentioned earlier about a new format for the conference serving as a format for discussion of national issues, they at WWF felt that they had really only seen the tip of the iceberg in terms of public interest in the topic, and perhaps there would be new proposals from other jurisdictions in that area. Without launching into any sort of debate on the pros and cons of predator control--whether it was grizzlies, wolves, coyotes, or whatever--he wanted to support British Columbia's suggestion that predator control be discussed in some depth at next year's meeting. It seemed to him that it might fit as a case study under all of the other suggested themes--"communicating about wildlife" and perhaps even "a wildlife strategy". He wanted to go on the record as saying that they would very much like to see some public and open discussion of this matter, because they felt that it was looming large as a national and perhaps international issue in terms of attracting attention to Canada.

His second point was a comment on the Canadian Wildlife Federation's report, particularly the second part dealing with Project WILD, the addendum. WWF felt that this was an excellent proposal on how to proceed with Project WILD and they supported those materials and vouched for the quality of them. They were very eager to co-operate with the CWF on this. In fact, they had put forward the idea of having participating members at $1000. They would like to be the first participating member in that whole scheme. He wanted to bring a recommendation to the Recommendations Committee urging the governmental jurisdictions to work co-operatively with the CWF in the distribution and utilization of these educational materials. He noted that it had been suggested that, just as an initial point, a contact person be identified, and then there was a subsequent procedure that clicked in and committees were struck, etc. WWF wanted to offer their support for the idea, and to urge other people to start taking the steps that were suggested in that report and start participating.

L.H. Mayeda (Nature Conservancy of Canada) announced that he would like to make a brief addendum to the highlights report that the Nature Conservancy submitted. Since the theme of this year's conference was team-work, he wanted to say publicly to Mr. Eldridge from Nova Scotia, for instance, how much the Nature Conservancy appreciated his hospitality and that of his minister with respect to some of their projects there; also to Art Smith who helped him out in Prince Edward Island, and to Mr. Pope and Mr. Sloan and their staff in Ontario. Through the operations of Charles Sauriol, they were already working on well over 22 very serious projects in Ontario, and about an equal number in other parts of Canada, and they wanted to thank Ontario for their ability to work with them in that province. Also, they thanked the Canadian Nature Federation for letting the Nature Conservancy pay their legal bills with respect to some hassles over land in Nova Scotia at Conrad's Beach, and also for letting them run up a $6000 legal bill to assist in acquiring some property just outside of Edmonton.

He also wanted to thank the federal government and the Province of Ontario with respect to two federal-provincial employment bridging programs that had assisted the Conservancy in employing, over the past couple of years, between 4 and 24 employees to a tune of about $150 000. This also helped to reduce their operating expenses by about $30 000. He wanted to thank CWS for their support in many Conservancy activities, and the World Wildlife Fund for letting them become a

partner in the Carolinian Canada Project. He also wanted to apologize to Ed Begin in Saskatchewan for the fact that, although the Conservancy claimed it was not an obligation, they had suggested that they would do their best to help them raise some money with respect to the Saskatchewan Heritage Marshes, but had not done that yet. However, it was still on their agenda.

The only other brief commercial message of national importance that he wished to make was that Mr. Sauriol had resigned as Executive Director of the Nature Conservancy of Canada on the 30 September 1983, and he himself had taken over that position on 1 October. Charlie remained with them, very fortunately, as special adviser, but on a half-time schedule, so that he could publish five books and get on TV, and have a great deal of fun.

The only other mention that he wanted to make was that the Canadian Council on Ecological Areas was holding its annual meeting at York University in Toronto on 28, 29, and 30 August, and a number of them were interested in establishing a national registry of ecological sites, some of which might understandably provide habitat for wildlife species. So those who were interested could speak to Tim Lash or himself about it. In addition, knowing that it would take 5 or 10 years to get anything on the computer, and to get any of the provinces and the federal government to agree on the kind of format in which to put the stuff on the computer, the Conservancy had decided to verbalize the situation with respect to the priority sites for protection in Canada. They would be hosting a series of regional meetings. The first organizational meeting was also taking place at the CCEA meeting at the end of August at York University, to establish regional priorities for natural areas and ecological sites--protection on a Canada-wide basis.

J.D. Yeo (Ontario Provincial Parks Council) said he had come there as rather an elderly student to try and learn something about Canadian wildlife, and hoped that he would have some input from this into the consideration of wildlife in the provincial parks of Ontario. He had a couple of questions to ask. In the Manitoba report, there was a program for a senior citizens' moose hunt. He was curious to know how one organized such a hunt for people of his generation and not have them shoot themselves or shoot each other. He had had to give up hunting some years ago because of eye trouble. Secondly, one moose having been shot, how did they get a 400 kilo-plus animal out of that hunting area if they were having these senior citizens do the hunting.

R. Thompson (Manitoba Wildlife Branch) replied that Manitoba had long recognized the contribution of this august group of citizens, and to that end the moose hunt was just a small portion of the total interpretation program, with a limited moose hunt as the focus. Senior citizens were invited to participate in a special workshop put on at the hotel on Hecla Island, and it was so well received that they were bringing along their family members. A little bit on what they were getting into when they were going out to hunt moose was discussed, as well as tricks of the trade. Also, along with that was a check station where biological data were gathered from the few animals that were taken. Staff assisted the senior citizens in bringing the animals out of the bush. If there was one small pitfall in last year's hunt, it was the fact that a lot of hunters preferred to sit in their vehicles and drink coffee. To try and get around that, they had incorporated a small change this year, where the senior citizen might take an immediate family member along. It was on a two licence/one tag system, and they were kind of hoping that gramps and granddaughter or grandson would be able to partake of this well-worthwhile experience.

J.D. Yeo said his other question, which he found much more pertinent to local problems, was mention in the Saskatchewan program concerning vehicle registrations and regulations. He was wondering how the Saskatchewan people managed to control the all-terrain vehicles (ATV) that could get through what often looked like impassable old trails. He had been on some of the old bush trails around Timmins that were kept open 30 years ago, and the constant ATV traffic on them was still keeping them open. It was very difficult to control them.

W.A. Klassen (Saskatchewan) said that although that sort of traffic was difficult to control, what they did was to designate certain trails that could be used, and whether others might be passable or not, that was where they were legally allowed to go, only on certain designated trails.

J.D. Yeo asked if they had any way of enforcing the restrictions on these off-limit trails that still existed, and that they could still get over with those vehicles.

W.A. Klassen replied that that was one of the difficult areas to control, but they were making some efforts and had had some success with at least some partial control. It was an extremely difficult thing to handle and to enforce, but it was still a step in the right direction. They were getting a lot of co-operation from a lot of people with regard to that whole program.

G. Sheehy (Canadian Nature Federation) said that he had a bit of an addendum to the predator control issue. In the past year, this was the one wildlife issue that they had heard more about from their members and school-children and the media than any other single issue, and it was really good that the British Columbia government was interested in opening this up to such a public forum as the Federal-Provincial Wildlife Conference. He thought it was certainly the way to go, to bring those questions out into the open, decide who those programs should serve, and provide some justification for them. So the CNF would definitely support the initiative of the World Wildlife Fund and the BC government in this regard.

R.G. Morgan (Ontario Federation of Angler and Hunters), referring to the report of the Canadian Committee on Ungulate Management, said that he would just like "supplemented deterioration of access roads" explained.

D.A. Hagan (Ontario Wildlife Branch) replied that the discussion arose about how to handle roads that were built for access for various resource management purposes vis-à-vis control of access to ungulate populations. There was a tremendous variation across Canada, perhaps to the extent that no resolution could be made on a national basis on that particular issue.

G.W. Pepper (Saskatchewan Wildlife Branch) asked if there was going to be an exchange of information on research, and D. Hagan answered that the information would be on research topics as related to ungulates.

G.W. Pepper then asked if that was an attempt to try to give direction to research, so that different jurisdictions would not be doing the same research; and if it was a prior planning exercise or just a monitoring exercise. D. Hagan said that it served as a co-ordinating exercise certainly.

J.D. Roseborough (Ontario Wildlife Branch) added that it served as an exercise to share the wealth of information and also as a co-ordinating exercise, so there was not a great deal of duplication between agencies, and they knew what was being done all across the provinces, and in the federal government and non-governmental agencies. So there was no duplication unless it was planned.

J.A. Keith (Canadian Wildlife Service) said that perhaps he was doing the unusual thing by commenting on his own report, but he spoke as Chairman of a standing committee of this conference, called the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). On page 3 of his report, there was a review of where they were in terms of total funding for the committee that he would like to bring to the attention of the provincial and territorial delegates. COSEWIC had been in action for quite a few years now. It had dealt with 90 status reports of mammals, birds, amphibians, reptiles, fish, and plants. This year, for the first time, they had been able to estimate how many more there were to do, and could report the main task that was still to be done by this committee with those groups of creatures. There were 60 more status reports to be made. The committee estimated that that could be done in 3 years, and it would cost $120 000 in total, which was $40 000 per year. CWS was trying to develop a proposal for partial funding of that amount. He wanted to bring it to the attention of delegates that unless the provinces and territories could see their way to contributing to that $40 000 a year, it would not likely get done. He knew that times were hard, but in this case they had a group of sub-committee chairmen who were very vigorous, and were capable of turning out the status reports through contractors at a rate that would get the job done in 3 years.

D.S. Morrison (Ducks Unlimited Canada) said that he would just like to take this opportunity to advise the ministers from the Yukon Territory and the Northwest Territories that Ducks Unlimited was interested in expanding up to that area in some way, to see what they could do to help the waterfowl resource. They would very much like to enter into discussions with them, maybe within the next year, on how they might work closer together.

Keynote address (1)

TEAM-WORK IN WILDLIFE MANAGEMENT

The Hon. A.W. Pope
Minister of Natural Resources,
Ontario

As the keynote speaker, and this being a Federal-Provincial Wildlife Conference, I thought I would, on behalf of my fellow ministers, but not necessarily reflecting all of their past histories or experiences, put forward a few political perspectives that I think warrant some attention by all of you here.

If you were in our central Ontario deer range during severe winters in the mid 1970s, you might have noticed woods-workers cutting brush to save starving white-tailed deer. These were Ministry of Natural Resources (MNR) employees. When it came to emergency help, they did their best--but that depended on the amount of work they were able to accomplish, available government funds, and other government priorities.

Now, during similar emergencies in that area, a small army of volunteers working in partnership with the ministry swings into action. They include the members of three organizations, some 70 registered volunteers in one district, and dozens of landowners, cottage organizations, senior citizens, home-makers, teen-agers, and others. Since the mid 1970s, these groups have donated thousands of dollars to buy food to distribute to starving deer. The volunteers are hard-working, enthusiastic, and effective--and we welcome their help.

I mention this example at the very outset because it illustrates how wildlife management in Ontario is changing. There is more sharing of management and responsibility. And that is something we intend to encourage. Some may yearn for the good old days--when things were simpler. I believe that 30 years ago the problems were just as thorny. We just did not recognize the fact.

Now we are more knowledgeable, and we respond to more people. We also deal with large, well-organized resource-users' groups. But still no single level of government can effectively deal with all the difficult wildlife problems of today. Speaking politically, there is no area of policy-making that has such deeply held divergence of opinion on basic general policy, and even on detail, than wildlife policy does for politicians in this country. In any event, in the 1980s, wildlife management without sharing is a luxury we just cannot afford.

Challenges of sharing

Because I see wildlife management from a political perspective, I also see many political challenges ahead for us that my fellow ministers have to deal with:

(1) The government, by claiming that its expertise and experience give it the right to set priorities and administer programs, tends to turn off valuable assistance and knowledge in local communities.

(2) The degree to which governments centralize decision-making is matched by the degree of regional and personal alienation, misunderstanding, and frustration in our citizens.

(3) Asking for shared responsibility and contributions must hold, as a trade-off, the right to set local or community priorities in that community.

(4) Information and involvement must be more broadly based than governmental agencies, private interest groups, or economic institutions and interests.

These are the challenges on the political level that ministers face in wildlife management policy in this country.

For the past several years, I have personally encouraged shared ventures in resource management. We have gained much experience and acquired many insights. In keeping with this conference's theme I would like to share some of them with you.

Over the years, competition for Ontario's natural resources has intensified. And, as this competition intensified, it became evident, generally, that the winners in any struggle over land use were often those who were able to exert the most pressure; those who, perhaps, were able to stake out a claim for themselves before someone else did. We often found ourselves in the middle of this competition. We were also asked to protect broader public interests, to protect our natural-resource base for future generations, and to protect local interests against uncaring provincial interests and vice versa.

This is a situation, I am sure, that many of you as resource managers are familiar with.

Guidelines and policies for land use

In Ontario, a partial answer to those questions has been the strategic land-use guidelines. The guidelines are inventories of Ontario's natural resources, with plans for their proposed future use. They provide a framework for land-use planning well into the next century. We undertook those strategic land-use guidelines because we also had to know: What were the long-term needs? Were resources available to meet the demand? What activities could be allowed and at what intensities? Were there gaps? How would those gaps be closed?

It turned out to be a massive exercise in a new co-operation even amongst ministry staff, and between that staff and the public. In effect, the exercise gave the ministry a whole new direction. Integrated planning, in turn, led to the need to come up with policies that linked program areas, and that forced Ministry of Natural Resources managers to circulate their plans for comments to other MNR managers. We are now finalizing internal guidelines for integrated resource management within our ministry.

Because of strategic land-use planning, we know more about our resources, where we are going, and how we will get there. And, at every stage, we are sharing this information with the Ontario public. We have shared our background information, our proposed guidelines, and the final versions of the guidelines. This was done through 184 open houses held in large and small communities across the province, and in seven regional forums. Please note that we deliberately opted

for an informal, non-judicial, non-administrative process. This indeed was a controversial decision.

Following revisions of our land-use blueprint based on public input, there were still many issues to be settled. We did this at a meeting with major users' groups. Twenty-six groups were represented--many of them here today--from forest industries to naturalists. During that meeting, these groups were given the opportunity to review, react, choose between options, and make trade-offs with one another about Crown land use.

I do not think any one group got everything they wanted, but I think most groups certainly managed to take care of their important priorities--if they were willing to compromise. Quite frankly, the naturalists and conservation groups did a better job of that at the meeting than the economic interests did. That meeting was a high point--slightly chaotic, but most definitely constructive. Decisions about natural resources affect a lot of people. They should be shared. I think our meeting with major resource-users proved how important that is.

Wildlife and habitat

We have been working on partnerships across all ministry programs, including wildlife. We attempted to start, and a very small start it was, with our status Indian people.

We had attempted to solve years of legal confrontation over things like native fishing rights by allowing status Indian people access to our decision-making processes, while maintaining our final arbritation status; and by negotiating a regulatory status for harvest fishing and our ability as a government to limit that fishing, and jointly with the Indian people to conserve our resources. I still think it was the right thing to do, but I do believe it was politically mishandled on all levels. We are now back to the courts, seeking to have them make what are essentially political decisions.

The major forest industries are now sharing the job of protecting wildlife habitat. Through our system of forest management agreements, companies are required to submit plans that include consideration of other resources, such as wildlife habitat.

Areas where commercial forest practices are altered to protect these resources are called "modified management areas". In these special areas, cutting is done in such a way that significant resource values are protected. These include the shorelines of lakes and rivers, as well as wildlife areas, such as moose-licks, moose-calving areas, travel corridors, significant deer-yards, and even Bald Eagle nests.

We have introduced new measures in Ontario to control moose hunting--a selective harvest system. But we could not have come up with that program or made it work without the co-operation of the thousands of people who were affected, and specifically without the co-operation and help of the Ontario Federation of Anglers and Hunters. But here our mistake, and one that created difficulty for me in this riding, was that we failed to discuss our suggestions, in advance, with the unorganized hunter. To counter the initial negative reaction, along with the Ontario Federation of Anglers and Hunters, we held public forums in

some northern Ontario centres to receive the suggestions of unorganized hunters before amending the program.

We have also been working closely with the Ontario Federation of Anglers and Hunters, the Northern Ontario Tourist Outfitters, landowners, lumber companies, individual hunters, and others in implementing a deer management program. One key aspect that needed the hunters' support and co-operation was the selective harvest system for deer that began in 1980 and has provided positive results.

Other ventures

We have even entered into partnerships with resource-users' groups to disseminate information. A 304-page hunters' guide in French and English will soon be available, thanks to a joint effort with the Ontario Federation of Anglers and Hunters. The guide, which has been rewritten with the permission of the Alberta Wildlife Division and the National Rifle Association of America, will include everything from information about hunters' ethics to survival in the bush. The Ontario Federation of Anglers and Hunters is printing and marketing the manuals in Ontario, and the proceeds realized, after all costs are paid, will go into hunters' education to enhance training across the province.

As with other provinces, we are receiving assistance from the World Wildlife Fund for status reports on some key threatened species. That organization is also helping us to re-establish Trumpeter Swans on Lake Ontario.

We also continue to receive assistance in our Peregrine Falcon reintroduction program. Last summer, Upper Canada College in Toronto offered facilities and staff time for a reintroduction project. This year, an insurance company in downtown Toronto is offering the same assistance. Individual naturalists and members of the Federation of Ontario Naturalists are also helping with sighting reports and surveillance.

A prime example of good co-operation, as has been referred to here earlier, is the Fur Institute of Canada. It was formed because governments--especially Ontario--wanted to share the concern, the cost, and the responsibility for humane-trap research, maintenance of markets, and public educational programs. They wanted to share these things with trappers, native peoples, wholesalers, manufacturers and retailers of fur products, and humane groups and conservation organizations interested in wildlife management.

The list of co-operative ventures is much longer and includes many old friends. Ducks Unlimited is spending $15 million over 5 years to create waterfowl habitat across Ontario in a partnership with the ministry. And our oldest partners may be the corps of hunters' safety instructors--scores of dedicated individuals across the province who have been training more than 30 000 new hunters per year in an effort to prevent accidents.

That is a quick, incomplete list of shared ventures in wildlife management in Ontario. It sounds good, but you know as well as I do, there is more to sharing than that.

Need for commitment

Some shared ventures are easy. Others raise questions that strike deep into an organization's philosophy, perhaps going against the grain a bit, or out of "sync" with the organization's objectives. Projects where a participant's principles could be compromised require negotiation, patience, understanding, and adjustment on everyone's part. They also require participants to make, in some cases, a giant leap of faith. But through consultation, co-operation, and careful compromise, it is often possible for partners in a venture to achieve more than they had ever thought possible, and at no cost to their principles or image. In fact, they stand to gain a lot. The credit goes to those who co-operate and take constructive action. The general public and the news media applaud those efforts.

I also believe there is a fear on the part of many non-governmental organizations that governmental wildlife managers are in favour of sharing your money and labour without sharing control and responsibility--or credit. That is understandable, perhaps, given the past history. But I do not think it is true today, because it is extremely counter-productive and would doom continued shared management.

Governmental organizations and non-governmental organizations need to commit themselves and pool their resources. And real commitment sometimes takes the form of funds that can be spared or raised through sponsored events, in the way that volunteers raise money for emergency deer-feeding during bad snow conditions, or through a group like the St. Catharines Fish and Game Club, who are raising money to support pheasant-stocking in their area.

There is so much to be gained by partnerships with resource-users' groups and individuals. Aside from any funds that both parties might contribute, partnerships allow the participants to obtain funds from sources that might not have been available otherwise. Private groups also have more freedom to negotiate in the market-place.

The most important commitment partners can make in wildlife management is a commitment to maintaining trust. That is the most fragile element in any co-operative venture. That is why partners--especially governmental managers--have to be extremely careful from the outset of a shared venture. If you, as a governmental agency or a manager, are asking your partners for advice, for consideration only, make sure that it is understood clearly by everyone concerned. If you are asking for advice upon which to base an action, communicate that clearly. And make sure that when you get that advice, you act upon it.

In other words, we as governments--and I have learned my lesson over the past 2½ years--have to communicate clearly. Failure to do so can harm a shared venture, can harm the partnership atmosphere that you have spent some time to build up.

Opportunities for sharing

This raises another question--who do you participate with and consult? Our experience in Ontario seems to indicate that interaction with organized groups is not enough. For instance, a minority of the anglers, hunters, or naturalists

belong to organizations. That leaves the majority in each case. But how do you contact them and get their opinions and advice?

I do not have any simple answers to that one, but I do know it has to be done and that it requires a variety of methods. I will be interested to hear how other delegates to this conference have been able to handle this problem. Just as an example, we have 87 000 hunters in the Province of Ontario whom we have to try and communicate with, probably more in fact. There are about 87 000 moose hunters alone in this province whom we have to try and communicate with.

There is also a fear on the part of some governmental people that shared programs will wind up costing more because there are more people involved, and more co-ordination of effort is needed. Governmental managers who believe that, I think, are overlooking several things. Those who have the final responsibility for wildlife management cannot do the job alone, and cannot afford to turn down the help of thousands of enthusiastic resource users who want to contribute. We cannot afford to ignore the opportunity to have closer contact with resource users. Our client groups also cannot ignore a chance to learn more about the complexities of the problems we face and the technical expertise we can pass on to them.

All groups--governmental and non-governmental--spend a lot of time, effort and money trying to convince, educate, and motivate each other. Why do we not just make it easier on ourselves by doing all that in projects on the job?

Where are we heading with this greater sharing of the task of managing natural resources--in this case, wildlife management? I think you already know. We need a system that educates and makes people aware of the value of wildlife; that causes them to care, to get more involved, and not leave the bulk of the job to government, the resource interest groups, and industry. We need a broad-based participatory system.

That is worth working towards. That is why I believe your theme this year is important. I believe that we can come closer to a participatory system through sharing wildlife management among ourselves and with the general public. This conference could be the beginning. I ask you, as provinces and organizations, to share your partnership strategies at this conference. But bring away something that will benefit all wildlife managers, resource groups, and others.

Four years ago, representatives at this conference devoted themselves to improving approaches to wildlife policy. From that conference came the document "Guidelines for wildlife policy". Those guidelines were approved by all provinces, the federal government, and non-governmental groups who attended the conference. The production of those guidelines marked a big step forward for wildlife managers across Canada, and illustrated the importance of these conferences.

I think this conference should undertake to produce similar guidelines to help everyone, including Ontario, to take advantage of shared wildlife management experiences in Canada. We need those guidelines right away, and all of you here represent the most knowledgeable wildlife people across Canada. This is the place and now is the time to begin that exercise.

SUMMARY OF DISCUSSION

R. Morgan (Ontario Federation of Anglers and Hunters) said that Mr. Pope was a minister who had communicated well and listened to his constituents, not only in his riding, but across the province within the resource management field. The minister had been looking for guidance as he went through his speech, and had talked about those members of the public who did not belong to organizations. So, in the interests of team-work, Mr. Morgan recommended to government that they encourage all sportsmen to join organizations like the Ontario Federation of Anglers and Hunters, so as to ease their communications problems.

M. Hummel (World Wildlife Fund Canada) was particularly interested and sensitive to Mr. Pope's comments about conservationists being, in fact, the compromising party in the case of discussions around the strategic land-use plans in Ontario. Even so, he said, this did not sound like a totally within-Ontario or in-house discussion. He felt that the compromises of middle positions offered by the conversationists, or pro-park lobby, in those discussions were quite significant and had been looked at by other people in the country, because Parks Canada was having the same kind of discussion about what kind of management was appropriate for parks "north of 60". To make a long story short, a number of them were prepared to offer middle positions on sports hunting in wilderness parks for the first time, on existing and expanding tourism within such parks, and even the conditions under which mining or exploration associated with mining might go on in wilderness parks. All of these were non-conforming uses for this classification of park in Ontario and elsewhere in Canada.

He thought that what Mr. Pope said was quite correct: that conversationists did make a somewhat calculated leap of faith. They felt that in the course of the discussions they were likely to get more if they compromised than if they did not. The old style had been to stick by their guns and not compromise. What he had wanted to say to Mr. Pope for some time was that the reverse side of that coin now was a responsible response on the part of government to those compromise positions that were taken, particularly by the so-called "pro-park lobby", that when they talked about sports hunting, they were talking about special sports hunting in wilderness parks with modes of travel that were compatible with wilderness parks; a quality hunt, a so-called "primitive hunt". In the same way, with tourism, they were talking about existing operations, but not expanding; and with mining, they were talking about mines developing in adjacent and comparable areas to parks, and hiving off the mines so that they were no longer within a park.

In other words, compromises were needed on these issues, but under very special conditions. He suggested that when these compromises were made by special interest groups, in turn they expected, and were very sensitive and watching very carefully for, some sensitive implementation of the compromises that were made.

A.W. Pope (Minister of Natural Resources, Ontario) replied that, for those who were not familiar with this situation, some of the discussions that were held with the groups were on mineral exploration and development in parks. He knew that Monte Hummel was asking him to see that the prescriptions for mineral

exploration licences that they might give out in the parks ensured that there was no claim-line cutting; that there was no road access to a drill site, but ferrying in by helicopter; that there was some clean-up of the site afterwards; that there was no trenching and no excavation of top soil; that more aeromagnetic work be done to select a specific site before the crews went in; and that some public information on the entire exploration program would be made available. They had recently encountered a particular sign of interest in an area that was not available for normal staking; it had been taken out and would need an application for an extraordinary licence. The conditions on that licence, which could be made available, contained a lot of those conditions that were the understanding of the groups when they had this discussion. So Mr. Hummel was right in saying that it was this kind of detail that was being monitored, to see how they specifically could put into place those procedures and policies to implement general decisions and, secondly, monitor performance under them.

Y. Dubé (Quebec Ministry of Recreation, Hunting, and Fishing) said that it was very refreshing to hear that the Ontario government was really giving some responsibilities to people who lived in communities. Mr. Pope had talked about community needs, local knowledge, native concerns, and so forth. Could he say if, in his opinion, not talking about the Ontario government necessarily, it would be a step in the right direction to give more authority, legally, to local governments or communities.

A.W. Pope said that Mr. Dubé had just hit the point that he had not wanted to put into his speech. They were having that discussion in Ontario right now, and he suspected that it was going to be one of the main points in the Royal Commission on the Northern Environment. He would be interested to see what their recommendations would be. He thought, for example, that in northwestern Ontario the real debate was between local communities and local lumbering interests, small individual operators who were not operating on a contract basis, but who wanted some security and some allocation of timber to them. Rather than having to direct that timber towards any specific large mill in a centralized location, they wanted to be able to establish their own small industries in the community and employ more people. On the other hand, he said, there was the ever-increasing demand of the major producers, in the same area, to have security of wood supply so that they could finance expansions and modernizations. The attempt to sort that out was meeting with a great degree of difficulty.

The main answer that he had to give, he said, was that they did not have, at this point in time, a policy in place that would have local resource allocation decisions made in each individual community. He did not know how they could sort out the demands between different users on a limited resource base. However, they had been trying to look at ways in which they could get more discussion and more flexibility, through their local district managers, with local economic interests. They had not done that great a job so far, but were working on it.

To some people, there was just no answer. They had got a set estimated supply of timber to be allocated so as to preserve jobs in the big mills. Therefore, it was not available to create jobs in small mills. The total citizens' group had the right to take that timber away from the big mill, and thereby cause some job insecurity, and give it to a small mill. He asked: Were there regional interests, uncaring ones, vis-à-vis the local communities? Would local community

interests be uncaring vis-à-vis regional needs? They were trying to deal with those issues, but they had got some dissatisfaction in some parts of northwestern Ontario over their allocations system.

G. Sheehy (Canadian Nature Federation) said that the issue of integrating forestry and wildlife had come up several times at that conference and preceding Federal-Provincial Wildlife Conferences. He thought they would all agree that those two sectors were not integrated very well in Canada now, and they had quite a long way to go in opening up forestry to broader considerations, other than maintaining or enhancing their supply of wood and fibre. He wondered if Ontario could at all outline what they had in mind for their ministry in integrating forestry and wildlife and opening up forestry.

A.W. Pope thought that the easiest way to do it was to have a local review of forest management agreements and licence arrangements. They had opted for an open-house system in 1981 for every forest management agreement, which, by the way, had been executed on already licensed lands. These licences had been in existence for 60-70 years in most parts of the province. With the "Forest management agreements", they had had open houses before the agreements were signed, while the maps were on the wall. They also had 20-year and 5-year plans that were subject to public review at open houses. They had found that Rick Morgan's people in the Ontario Federation of Anglers and Hunters, some of the cottagers' associations, some of the northern Ontario tourist outfitters, and individual tourist operators in the area had come to the open houses and virtually forced an integration of forest management practices with other resource uses by their comments, and by the concerns that they brought up before the public.

So, by putting it to local communities for comment before execution and before the plans were approved, they found that they could accomplish a lot of this integration. The companies being present, as well as the Ministry of Natural Resources staff, both were exposed to the other pressures that the local politicians and local district managers tended to get exposed to. They found that it was working better that way. Of course, the complaint of the industry on the other side, which he had heard, was that anywhere from 15 to 20% of their previously licensed land was being taken away from them because of the demands of other resource-users. In some cases, they made the case that it affected the cost of operation, and therefore the viability of industries in certain places. Ontario had got to be sensitive to that counter-argument as well. But certainly, with their exclusion process and modified management process, there had been a more significant impact on the amount of land available for harvesting than there had been before.

G. Sheehy agreed that the approach of opening the process up to the public was really good. He would certainly support that, but thought that the approach to some extent over-estimated the competence of the public and public-interest groups to identify and promote the best approach in managing a forest to maintain the broader benefits. They were all aware that the ministry had talked about reducing its role in research. On the other hand, there was a strong need for much more applied research in the area of environmentally sound forestry, or forestry that was sensitive to wildlife.

A.W. Pope said that they were increasing their research role, but that was another issue for another day. He agreed that the weakness of the process to date had been that it was very difficult for organizations, some of which had staff

based outside northern Ontario, to get up there on a regular basis, because it was expensive to go there and spend some time reviewing the plans. Somehow they have got to find a better communications system with provincial interests who had every right to play a role in the process, as did local game and fish clubs, and local tourist operators. That was one of the problems that they were trying to wrestle with. He had made a decision in 1981 to reject a centralized hearing process, which was very costly, time-consuming and, in some instances, did not resolve the problem; although that was not a universally held opinion even within the Cabinet of Ontario.

Panel: Case studies of team-work (1)

INTRODUCTION

J.R. Sloan
Chairman

I should clarify at the outset that the reason why I am your Chairman is to ensure, particularly following the keynote speaker, that there is some non-political balance to the program.

The panel is challenged to stimulate some meaningful discussion, not only in this session, but in the ensuing sessions throughout the conference. I think that you would agree that the Program Committee has selected a high-calibre panel to talk to us about a very meaningful and timely topic: about working together--that is, team-work in wildlife management.

If I may now introduce the panel, they are: Alcide Giroux, President of the Ontario Trappers' Association; Ron Cockerill, the Land Negotiator with Ducks Unlimited in Manitoba; the Hon. Nellie Cournoyea, Minister of Renewable Resources and Information, Northwest Territories; and Michel Cantin, Director of the Wildlife Areas Division, Quebec.

(After they had spoken, the Chairman thanked the four speakers for the work that they had put into their papers, which follow in these transactions.)

Panel: Case studies of team-work (2)

CO-OPERATION IN WILDLIFE MANAGEMENT NORTHWEST TERRITORIES STYLE

The Hon. N.J. Cournoyea
Minister
Renewable Resources and Information, NWT

I was both surprised and pleased when I received your invitation to speak at the Federal-Provincial Wildlife Conference--surprised because, although the Northwest Territories is large in size, we are few in number, and as a result are often not recognized in national forums--and pleased because I think we do have a great deal to contribute, especially with respect to this year's conference theme, co-operation in wildlife management.

I feel particularly well equipped to speak about co-operation in wildlife management, since I am likely to be the only Minister holding a renewable-resources portfolio in Canada who grew up on a trap-line, and had a chance to observe resource management from "the other side". My roots are in the Mackenzie Delta, where most of the time my family depended on fine-fur and muskrat trapping for their cash income, and upon the land to put food on the table. I know, first hand, the devastating effects that can result from fluctuating fur prices, as well as the hardships caused by fur-bearer cycles.

That experience has left me with a somewhat different view of what management should be about--a view that places emphasis on the human element in the management process, and sees our increasing technical capability as nothing more than a tool to be used in what is essentially a "people process". Where I grew up, the "game warden" was seen as a friend who provided assistance when he could, who brought the mail and the community gossip, and who rarely found it necessary to enforce regulations. For a while, in the North, we may have got away from that basic approach, placing our confidence in technical and legislative solutions to management problems. In short, our vision got blurred. However, I am pleased to say that in the past few years we have slowly been getting back on track.

The roots of co-operation

In the Northwest Territories, our co-operative wildlife management depends upon the involvement of resource-users, both in the decision-making process as well as directly in wildlife management programs. Our approach requires a great deal of discussion with those resource-users. To achieve this, we rely on our community-based Hunters' and Trappers' Associations (HTAs) in those areas above the tree-line, and upon both HTAs and Band Councils in the Mackenzie Valley and Great Slave Lake areas. I expect that the HTAs are unique in our jurisdiction. They have existed in some communities for a rather long time, having been first formed in the Mackenzie Delta when individual registered trap-lines were being dropped in favour of registered group areas. Gradually they were established in other northern communities to represent the concerns of those residents who gained their livelihood from the land.

At present, we consult with HTAs on a wide range of issues. Legislation changes affecting hunting or trapping are routinely referred for comment. Trappers' Assistance and other subsidy programs are discussed with HTAs, and increasingly they are taking on actual responsibility for administering such programs. In the management of wildlife species that are harvested under quota by holders of the general hunting licence (mainly native people), HTAs take primary responsibility for tag allocations within communities. This is particularly important for species like polar bear, where tags are much in demand and represent a significant proportion of the community income. Obviously community residents are in the best position to make such allocation decisions. Finally, HTA members play active roles in most of our wildlife surveys. This serves two purposes. First, they contribute their particular knowledge to the survey and hence increase its chance of success. Second, they have an opportunity to satisfy themselves with respect to the survey techniques.

Specific examples

Although our relationship with HTAs and Band Councils best represents our on-going intent to co-operate with resource-harvesters, there are a number of specific projects that I would like to highlight, since they illustrate some of the opportunities for co-operative ventures that we see for the future. One of the first management agreements that we approached was in 1980, and this was the Banks Island Muskox and Caribou Agreement between the Government of the Northwest Territories, the Banks Island Hunters' and Trappers' Association, the Inuvialuit Game Council and communities, and the native organization, the Committee for Original Peoples' Entitlement.

Possibly the most widely known co-operative management program in which we are involved is the inter-jurisdictional board established in 1982 to manage the Beverly and Kaminuriak caribou herds. Since it will be discussed elsewhere during your conference, I will not spend a great deal of time on it, other than to say that we feel that it represents mutually beneficial co-operation on a number of different levels, but particularly between governments and users. I am not sure which was the most difficult task, to get the governments talking to the resource-harvesters or to get them talking and co-operating with each other. However I think we are all pleased with the progress to date.

We visualize a similar role for the proposed inter-jurisdictional committee that is being formed to manage the Porcupine caribou herd, which roams from Alaska across the Yukon and into the Northwest Territories. In my view, the flexibility that we sacrifice as individual jurisdictions in such joint management arrangements is more than repaid by the effectiveness of the co-ordinated management that occurs in each jurisdiction. Most important, because of the users' involvement, such management receives support at the community level.

Involvement in the management of renewable resources can often provide something more than just satisfaction for northern hunters and trappers. It can mean a significant additional cash-flow to the community. Probably the best examples of this to date have been the wildlife harvest studies conducted by the Baffin Region Inuit Association (BRIA) and the Keewatin Wildlife Federation (KWF). Until recently, data on fish and wildlife harvests were collected by officers of my department as part of their regular duties. For a host of reasons, the

resulting information was at best suspect. More recently, BRIA and KWF have been contracted to collect the information. Aside from the benefits of an increased cash-flow, this approach also results in data that are most acceptable to all parties. In fact, we are sufficiently pleased with the results that my department, in conjunction with Environment Canada, and Fisheries and Oceans, plans to expand this successful experiment to the entire Northwest Territories.

This success has also caused us to examine other programs or projects that local HTAs or Band Councils might take on. This spring, we took a very significant step when we entered into an agreement with the Baffin Regional Council (the umbrella organization for HTAs on Baffin Island), which enables a number of Hunters' and Trappers' Associations to undertake raptor nest-site inventories. These inventories, which will inject several hundreds of thousands of dollars into the community economies over the next few years, will provide my department with valuable information far in advance of when we would have collected it on our own. They also make good use of the special knowledge that individuals have of their own trapping areas. The icing on the cake is that these inventories promote understanding of the special expertise that the resource-users and the wildlife biologists each bring to the project.

Land claims

Few events in the North will have as profound an effect on the co-operative management of all renewable resources as will the settlement of our aboriginal land claims. Although I do not wish to go into details today, I am sure you are aware that the Inuvialuit of the Western Arctic signed their final agreement with the federal government 2 weeks ago in Tuktoyaktuk. Two other negotiations are currently underway, the first involving the Dene and Métis people of the Mackenzie Valley and Great Slave Lake area, and the second dealing with the Inuit of the Keewatin, Baffin, and central and high Arctic.

In all negotiations, northern native people have made it clear that one of their fundamental concerns centres on the management of the wildlife resource, since that resource is so important for their long-term well-being. In the claims process, this concern has resulted in the establishment of Game Boards and other committee structures that will ensure that claimants are participants in virtually all management decisions. All northerners will be watching closely to see how this partnership between government managers and native people develops.

The future of renewable-resource harvesting

Although I am confident about our ability to work with our resource-users to build a viable renewable-resource based economy in the North, I am less certain that events outside the Northwest Territories and Canada will permit us to do that without a struggle. Some of our coastal communities, which depended on the sale of seal skins for a significant portion of their income, are only now feeling the full impact of the anti-sealing campaigns. Incomes have plunged and alternatives are few.

Now it appears that opponents of the fur industry will use the leg-hold trap as a cause to attempt to destroy that industry as well. If ever we were faced with a situation that called for co-operation between governments and users across Canada, this is it.

For our part, we are enthusiastic supporters of the Fur Institute, since we see it as one of the obvious avenues for co-operation. However, during the next few days, I and other members of the Northwest Territories Renewable Resource staff look forward to talking with many of you to see what other methods we may use to protect a way of life that is an essential part of the North.

Case studies of team-work (3)

WILDLIFE MANAGEMENT BY NGOs ON CROWN LANDS

M. Cantin
Director, Wildlife Areas Division
Quebec

Wildlife management throughout the vast areas of Canada presents a true challenge. If we want to go beyond the general, and look for control that is at all specific, the task soon becomes huge. Quebec certainly appreciates the difficulty of managing the wildlife resource on its own, even with an army of biologists or conservation officers.

It is not my intention in this paper to list all of the projects being carried out in co-operation with non-governmental organizations (NGOs), but rather to put more emphasis on two or three examples that have had the greatest impact on the way in which wildlife is managed on public lands.

Background

The first step in delegation of management was taken with the private clubs--groups of individuals to whom were granted all hunting and fishing rights in a given area, and who were asked to oversee it. The earliest private clubs date back to 1872 and the Ristigouche Salmon Club--one of the 10 clubs still in existence, and now the oldest fishing club in Quebec. The golden age of private clubs was between 1940 and 1975, when there were as many as 2200 of them covering an area of 78 000 km^2.

Outfitting concerns with exclusive hunting and fishing rights, which could be looked upon as commercial clubs, appeared in the early 1940s. After 1960, the number of our outfitters peaked at approximately 200, and now stands at 164. Other concerns, without exclusive hunting and fishing rights, made their first appearance in the 1960s, and there are now 311 such outfitters.

Finally, "Controlled harvesting zones", or Zones d'exploitation contrôlée (ZEC), which represent the ultimate in participation, were established in 1978 following "Opération gestion faune" ("Operation wildlife management"). This event brought about a big change, because it marked the end of the era of private privileges and the beginning of an era of truly delegated management, in which each citizen who wished might participate in making the decisions on wildlife use. There are now 66 of these ZECs. Now, how is all this managed?

Present situation

Characteristics of each network

Definition

A ZEC is an area in which the management of hunting, fishing, and trapping activities is entrusted to a non-profit organization. This delegation is est-

ablished in a memorandum of agreement signed by the approved association and the Minister of the MLCP (Ministère du Loisir, de la Chasse et de la Pèche).

An outfitter is a business that offers accommodation and services related to hunting, fishing, and trapping for payment. Thus, its purpose is primarily commercial and for profit.

Management

The 66 ZECs cover 41 500 km^2 and have 523 km of salmon rivers; they are managed by approved associations that any citizen can join. The members are in control. They elect the boards of directors and set fees for membership cards, access rights, or the use of road systems. They can also set all-inclusive fees within the limits set by the regulations. With the exception of the six ZECs on salmon rivers, all of these ZECs handle their operating budgets without financial help from the government. A budget of $800 000, however, is set aside for capital expenditures.

Outfitters are regarded as small businesses, and half of them have only one owner. These concerns, to which hunting, fishing, or trapping rights are granted, are in fact the only ones able to claim that they manage the wildlife that they exploit. The concession-holder is therefore free to set whatever charges he or she thinks appropriate, and to establish suitable procedures for harvesting wildlife, in accordance with the regulations governing the zone in question. The concessions cover an area of 13 500 km^2.

Wildlife use

With ZECs accounting for 1.6 million recreation-days, and outfitters for 1.2 million, areas under delegated management make up a large share of the wildlife supply in Quebec. This compares favourably with the network of parks and sanctuaries, accounting for 1.3 million recreation days, though covering a larger area (91 000 km^2).

Economic significance

All of this generates not a little economic activity. In 1980, an annual income of some $5.25 million was anticipated for the ZECs, and of $30 million for outfitters, not to mention the significant number of jobs created.

Citizens' interest in management

It is usual, in the case of the outfitter, to find some concern for wildlife management, because this is tied in with the very nature of these enterprises. The taste for these business opportunities is such, in fact, that we constantly receive requests for starting new outfitting concerns. The problem is therefore not in arousing interest, but rather in withstanding the pressure, and distinguishing between what can and cannot be allowed.

With the ZECs, most users consider themselves as clients rather than co-managers. We have also found that membership has declined by half when membership cards were no longer compulsory. The annual meetings are nonetheless quite popular,

and we must commend the untiring efforts of some 650 ZEC administrators who work hard to meet the demand as fully as possible.

It is heartening to note that the concerns of managers have changed since the start of "Opération gestion faune". While repairs to roads and culverts, and the obtaining of grants were at first the main topics of discussion, they speak now of resource distribution, environmental capability, and compatible land use.

This transformation came about certainly through a natural maturing of boards of directors, but also thanks to the educational efforts of the ministry, primarily in the form of the "Forma-faune" program, which offers 2-day courses at two levels. Initially prepared for ZEC managers, "Forma-faune" is now open to outfitters. In 1983, for example, 218 people benefited from these courses in subjects including ecology, aquatic and terrestrial fauna, wildlife protection, and management planning procedures.

The management plan prepared for each ZEC is undoubtedly the first step towards an understanding of the area concerned, its resources, and the constraints on its management.

The outlook

In a climate of constant change, it is vital to find out what is happening and make regular adjustments. In my view, three things could become determining factors in the years to come.

(1) Despite any prevailing optimism over the Canadian economy, everyone has laid to rest the utopian dreams of unlimited growth. By the same token, we must dismiss from our minds the dreams of an omnipresent, rich, and providential government. Instead, we will have to rely more on the imagination and resources of NGOs to successfully carry out our mandate to manage wildlife.

(2) Although regional or even local peculiarities must not be smoothed away, the harmonious development of lands under delegated management must certainly involve a rearrangement of the agencies concerned. Such was our contention in favouring the establishment of a federation of ZEC managers and in supporting the efforts of the Quebec Outfitters' Association.

These two agencies should, in our opinion, constitute the crucible needed for approved associations and outfitters to adopt a more coherent position in relation to the government, thereby making it easier to grasp problems, and above all to agree more readily on solutions.

(3) Outfitting, with its influx of risk capital and its concern about overspending, should provide the area where development will be most intense in the years to come. It is probable that the new provisions set out in the province's Wildlife Conservation and Development Act will favour such development. This would be made possible partly by giving greater guarantees to businessmen, and also by the ability to define more clearly the sectors where long-term development of this type is desired.

An approach similar to that developed for ZECs concerning wildlife management plans will need to be adopted for outfitters. This is essential, in my view,

if we want to make maximum use of wildlife capabilities while ensuring their continuance.

Conclusion

My crystal ball may be clouded or even deceptive, but one thing is certain: non-governmental agencies are here to stay, and their continued presence is undoubtedly the best evidence of Quebeckers' interest in wildlife, and the best assurance of its preservation. While delegation means a loss of government's supremacy, for society, participation in management will increase its interest in wildlife and ensure that the decisions correspond with everyone's expectations.

Case studies of team-work (4)

TEAM-WORK BETWEEN LANDOWNERS AND USERS

R. Cockerill
Land Negotiator
Ducks Unlimited Canada

What is team-work? My dictionary defines the word as "co-operative effort by the members of a team to achieve a common goal". Well then, if the definition means a co-operative effort by all members of the team required to reach the goal, we are sitting here without much hope of success. The key member is absent. The farmer is missing. Without him, we are losing the land battle. In fact, as we sit here for these 3 days, another 100 ha of wetland habitat is being destroyed. The majority of waterfowl are raised on wetlands owned by the farmer, over whom we have little or no control.

Since 1938, Ducks Unlimited (DU Canada) has worked co-operatively with over 5500 landowners to preserve 1.4 million ha of wetland habitat. This, however, is short of the suitable land base required to maintain the current waterfowl population. The farmer is the key to saving this habitat, and it is this point that I will be emphasizing. I will briefly explain how DU Canada goes about securing wetlands, and will elaborate, with examples, on some of the problems and attitudes I have encountered in the field.

Throughout this presentation I will be assuming that everyone knows that DU Canada is the Canadian wing of an international, private, non-profit conservation organization dedicated to the perpetuation and increase of North America's waterfowl resources. It is the Canadian wing that undertakes most of the restoration and preservation projects.

DU is caught in the middle of the land-use issue. We are a private organization that must operate in the same manner as the private landowner. It is a business that must show results. Contrary to popular belief, it is not a branch of a government department. Even though very few projects are built without some form of government involvement, whether it be for authorization or direct co-operation in the project, the farmer is still the main cog in the wheel of success.

Initiating projects

I began negotiating projects almost 6 years ago, when I started as a biologist, working predominantly in Manitoba's Interlake region. It was not until 1982, however, that securing agreements with landowners became my major responsibility. My title is Land Negotiator.

We operate on a free-easement policy, meaning that the farmer provides his property and, in return, receives no economic gain other than the benefits the project brings him. Before DU constructs a project, all farmers and landowners affected by the water level must sign agreements. This requirement has seen many projects fall by the wayside because, in some cases, of only one landowner's refusal. Their reasons for not co-operating are more numerous than one can

imagine. However, in many cases, they result from misunderstandings, not only about DU and the project, but wildlife management in general.

Projects are initiated in many ways. Each and every project has its own set of circumstances. The area may be flood-prone, lacking in water, or in jeopardy of being drained. Each potential wetland is evaluated, and on the average only about 10% become DU projects. Wetlands may be rejected along the way because of biological, engineering, or landowners' problems. The last account for at least 50% of all rejections, and that is why having the landowner on the team is so very important.

Once the biologists decide what management designs are needed in a particular wetland to create good waterfowl breeding habitat, such as more water, less water, or leaving its level as it is, the engineers begin their job. The project is designed and costs are calculated. If the cost/benefit ratio is acceptable, then the Land Negotiator goes to work. Negotiations with the farmer usually involve preliminary, intermediate, and final stages:

(1) The preliminary stage is more of a "feeling out" than anything else. It is perhaps the most critical, because it gives a good impression of the problems that will be encountered during negotiations. It is in this stage of negotiations that the trust of all the farmers must be obtained, as well as their permission to carry out any further investigations.

(2) At the intermediate stage, regular contact is made with the farmer to update him on the developments. Farmers like to be kept informed, and the easiest way to complicate, and perhaps lose, a potential project is to leave a large time-gap between the preliminary negotiations and final signing. It is in this period that rumours run rampant.

(3) The final stage of negotiations should be just to obtain the farmer's signature. It does not always work that way, however. In many cases the farmer's attitude has changed. In fact, attitudes can change at each stage, and that is why constant contact is so important.

Farmers' objections

The majority of farmers who object to wetland conservation fall into one of three attitude categories. Recognizing these will save time and help clarify misunderstandings. These farmers will be either sceptical, indifferent, or objecting, and each stance requires a different persuasive approach.

Let me explain with a couple of examples. Last summer, I was negotiating a 100-ha wetland in Manitoba's southwest with eight farmers. The area had been plagued with increased land clearing and drainage, thereby causing flooding problems in most years. At the preliminary stage, all farmers were receptive to the idea of flood control, but a couple were against increasing the duck population, because of depredation problems that they had occasionally faced in the past. We proceeded to the final stage of design, because the wetland was in jeopardy of being drained. We felt that the crop depredation issue could be resolved.

Upon returning to discuss the proposal with the farmers, I noticed that they had excavated their own ditch out of the marsh, and water was running everywhere.

The future of this wetland looked grim, and eventually the ditch downstream could no longer handle all the water, and it began flooding a neighbour's cropland. The farmers were at this point aware that their unilateral action was creating a new set of problems of obvious economic concern. If we were to save that wetland, we had to sell our proposal immediately. Four of the eight people signed with little problem. However, of the remaining four, two were sceptical, one was indifferent, and one was expressing objections.

The two who were sceptical did not believe that DU would reduce the level of the slough. They were always under the impression that ducks liked lots of water. Furthermore, they did not trust us because of rumours they had heard. To counteract scepticism, similar successful projects were cited. We provided photographs, and also the names of satisfied landowners, as references. Although this dispelled many of the rumours, their source had to be found. That source lived a few kilometres away, where DU had previously tried to develop a project, but without success. After spending considerable time explaining the truth, their confidence was gained and they signed. Had scepticism not been recognized and overcome, the outcome could have been failure.

One of the farmers expressed indifference. He said that the DU project was not going to benefit him, so he was not going to sign. He saw absolutely no reason for keeping the wetland. How do you handle this type of indifference? You must work on trying to uncover an unrealized need. That is, something that may benefit him, but he does not realize it, yet.

Through discussions, it was learned that years ago he and his father used to make hay on a large whitetop meadow adjacent to the marsh. The increased flow into the area had made the meadow too wet to be a reliable source of hay, so he had converted it to pasture. It was overgrazed and of little value to wildlife. He stated that feed had to be purchased annually to maintain the size of his beef-cattle herd. I asked him if he would like to be able to hay that wet meadow again. His reply was, "Yes, but we have to get the water out first, and our system is causing problems for my neighbours. I hope the municipality will improve the downstream ditch". I explained how we could get rid of the excess water, and how we could incorporate a back-flooding project for his benefit. We could back water into this meadow to give it the moisture it would require, and then release it around the end of July, so that he would be able to cut the hay. I stressed that draining this wetland was going to change the species of the grasses, and then it would only be good for pasture for evermore. He agreed, and we continued to discuss the back-flooding project. It was incorporated and he signed. We had uncovered an unrealized need.

The last person objected to the project. He wanted nothing to do with anything that would raise one more duck, and he wanted nothing to do with the DU agreement. Objecting landowners are definitely the hardest to convince. To convince this individual, we had to prove that the benefits would outweight the drawbacks. I stressed six things:

(1) Eliminating the flood level would free up more land for agriculture. He had already realized this because he was one of the drainage instigators.

(2) Depredation was affected by the weather more than anything, and it was the fall flight of ducks that caused the problems, usually not the locally raised ducks.

(3) The agreement legally bound DU to the maintenance of the project, thereby guaranteeing that it functioned properly.

(4) Potential buyers being aware of a flood-control project on the easement might help to sell the property some day.

(5) His neighbours around the wetland were in favour of the DU solution to solving the downstream problems.

(6) If DU improved the downstream drain, it would not be at the expense of the taxpayer, which it would be if the local municipality did the work. After much discussion, he realized that the benefits outweighed the drawbacks, and he signed.

This wetland was saved from extinction, and a back-flooding project was incorporated for the benefit of both the farmer and wildlife. However, the fate of most wetlands is quite the opposite. The negotiations can break down, and then the entire project development process halts.

On a project in Manitoba's Interlake region, negotiations are at a stalemate because one landowner out of the 10 feels that one more duck is too many. He said: "The Federal-Provincial Crop Depredation Program is a farce, and an insult to the farmer". Consequently, he wants nothing to do with an organization dedicated to preserving wetlands. He is definitely not on the wetland conservation team. Every attempt has been made to show that the benefits would outweigh the drawbacks, but to no avail.

On another project, all landowners are very much in favour of development. It is one that the Manitoba Fisheries Department wants to use for pickerel-rearing to support the Lake Winnipeg commercial and sport fishing industry. The fisheries aspect alone has monetary benefits to the commercial fishing industry of up to $300 000 annually. However, to obtain Crown agreement, a local government resolution approving of the project is required. Council stated that it would hold this project to ransom for as long as necessary, until the crop depredation program covered the farmer's losses due to depredation.

The response

What do we do, as a team, to turn around this lack of respect for wetlands and conservation? These are the considerations:

(1) We must show more respect for the farmers. It is their lands that raise the wildlife. We must make them members of the team from the preliminary negotiations stage through the entire project development process.

(2) We must do something to ensure efficient delivery of the Federal-Provincial Crop Depredation Program. The majority of farmers who suffer damage do not even apply for compensation, because of the small amount they may receive in the end. Most do not feel that delaying the harvest to have the damage adjusted, as required by the present agreement, is worth the down-time. In many cases, the damage only becomes worse and the compensation is too low.

(3) We must get into some form of economic arrangement on wetland complexes, and begin with those that are in danger of being drained. As an example, we might have wetland areas excluded from the tax-roll and the exclusion shown on the annual tax notices. In that way, farmers would know that they were getting economic gain by preserving wetlands.

(4) We must insist that municipal governments improve and enforce policies and acts that control drainage.

(5) We must educate people in conservation, beginning in our schools at the primary grades. This education must identify a change from traditional farming practices to practices that will show increased profits for the farmer, but still benefit the soil and wildlife. For the past few years, the DU Agricultural Extension Group has been working with farmers to demonstrate the advantages of zero tillage, stubble mulching, rotational grazing, and winter wheat. We have published information pamphlets on these topics, plus stubble-burning, water control, and salinity.

(6) We must work together on projects with potentially conflicting land-use pressures to ensure that the correct information is available to the land-users.

Let me explain this last point with an example. The incident originated in The Pas, from the Saskeram Marshes, which is part of a provincial "Wildlife management area". This land was originally set aside for wildlife decades ago, in compensation for vast areas of habitat that were lost due to the construction of a large hydro-development project. The province and DU have been improving this area for wildlife.

Recently, the agreement had to be renewed. A very small number of farmers from the area opposed it. Through use of the press, they attempted to discredit DU, often using misinformation. Rumours spread throughout Manitoba, threatening and halting projects in other regions. Had a decision been made quickly by the provincial government to preserve this wetland, the repercussions would not have been so widespread. This productive marsh has now been secured, but the aftermath of the conflict is still causing problems. It is very important that major decisions on the part of governments be made quickly.

In summary, the road ahead for wildlife does not look good. We cannot go on any longer just talking about what has to be done. Ducks Unlimited is prepared to co-operate with anyone, whether it be farmer, corporation, land speculator, or government agency to preserve and develop wetland projects that provide a wide spectrum of benefits. With the co-operation of, and team-work with, the responsible agencies and the farmer, we will continue to save wetlands, but alone we will be unable to realize our objectives.

Wetlands are a precious resource well worth saving. Let us work together as a team to ensure that our children will be able to enjoy them and the wildlife they provide.

Case studies of team-work (5)

INDUSTRY AND GOVERNMENT IN TUNE

A. Giroux
President
Ontario Trappers' Association

I was pleased when asked to speak on "Industry and government in tune", or industry and government team-work. We feel that team-work is extremely important, and is essential if we are to achieve our objectives of sound management of wildlife and the welfare of the fur harvesters.

I want to take you back a few years, to 1947, and briefly touch on some of the achievements in Ontario, gained through co-operation and team-work by the Ontario Trappers' Association (OTA) and the Ministry of Natural Resources (MNR).

Although determined to organize an association to deal with the many problems facing trappers at that time, which included the marketing of their furs, we could not have succeeded without the support and co-operation of the then Ministry of Lands and Forests (now MNR). This support and co-operation meant not only strength, but the very existence and survival of the OTA. On many occasions I have stated that, without the early and continuing support of our government, we would not be in the sound and credible position we enjoy today. We realize that there is still much work to do, but we can also be proud of what we have accomplished with management programs. I will deal with each program separately.

Registered trap-lines

Our registered trap-line system came into effect in the late 1940s, with the input of trappers. It was adjusted by line changes to accommodate the trappers for such reasons as accessibility and, in some cases, production capabilities. Again, this is an effort of co-operation between the trappers and our government.

Quotas

We believe in the sound management of all resources. With input from the trappers and the wildlife biologist, reasonable quotas are set according to fur-bearer populations, and changed whenever necessary to manage the resource.

Studies and surveys

Studies have been conducted in a co-operative effort, with information from trappers, MNR, and the OTA determining the quality of pelts in order to properly set the opening and closing of trapping seasons, so that only prime pelts will be harvested. I cannot over-emphasize the need for such programs, which can only succeed again through team-work and understanding by all involved.

Private land progress

By the mid 1970s, the ever-increasing price of furs caused an influx and increased the numbers of trappers harvesting on private land. A committee consisting of MNR personnel and executive of the OTA dealt with this matter and, as a result, the "Private land management program" was introduced, and will be implemented by the 1984-85 trapping season in Ontario, enabling us to manage the fur-bearers on private land as well as on registered trap-lines.

Regulations

From time to time, in order to promote humane trapping methods, we must improve our trapping system. Recommendations for new regulations are then introduced, and come into effect after agreement between MNR and the OTA--just another example of team-work between our industry and government. We are now in the process of dealing with just such matters at this time, and we are prepared to accept necessary changes in order to protect our image as fur-harvesters, and the fur industry as a whole, and definitely to reduce the pressure from anti-trapping and anti-conservationist groups on our government.

Agreements

The OTA has entered into an agreement with our government for the printing, distributing, and marketing of trappers' educational material, consisting of books on the management and biology of fur-bearers. This agreement also includes films on fur-bearers. Revenues generated from the sale of these books and films are directed to a Trappers' Education Fund, from which both MNR and the OTA make allocations according to priority and as deemed necessary.

Trappers' education and public relations

We recognize the need for further work in the field of fur management and trappers' education. With this in mind, and with the support of our government, a 1% levy will be collected on all fur sold through our auction house, starting with the December sale. From this, 0.5% will be returned to the provincial associations for trappers across Canada for trappers' educational purposes. In Ontario, the money will be directed to our joint Trappers' Education Fund, again to be allocated according to priorities by both MNR and the OTA.

The other 0.5% will be channelled to the new Fur Institute of Canada, for trap research and development, and equally important, for public relations, education, and information in Canada and abroad.

Courses and workshops

In order to promote effective and humane trapping, courses and workshops promoting harvesting and handling methods have been conducted throughout the province for many years. Included have been our northern communities, as far away as the Hudson Bay, Fort Severn, and James Bay areas. Having been personally involved in some of these workshops, I can assure you that the successful results were due to co-operation and team-work between the OTA and MNR.

Workshops are an effective means of up-grading practising trappers. However, new trappers must be trained, and trained well. Therefore, another joint effort is the mandatory fur-harvest, fur-management, and conservation course for all new trappers in Ontario. Beginning in July 1981, all new trappers have been instructed in the most effective and humane practices, along with fur preparation. This is an accomplishment we can all take pride in, as we co-operated in the production of the teaching manuals, which are marketed by the OTA, and we return a royalty to the province on sales.

OTA Convention

I could elaborate on various ventures and programs that have succeeded because of co-operation, but one more example is the OTA Convention, where MNR sponsors a breakfast, with the proceeds going into our joint Trappers' Education Fund, and where our trapper delegates have the opportunity at the MNR workshop for dialogue with ministry officials.

At our last convention, we took the opportunity to recognize the support and co-operation of some of our trappers and government people who had assisted in the organization in the early days of this association. We stand tall and proud today because of the spirit of team-work that existed back then, and still exists today. Many of those honoured were government officials, and I must make special mention of Jack Grew, a real friend of the trappers over the years. There were countless others who helped make it possible for the OTA to evolve from a first meeting of 18 trappers in 1947 to a 20 000 membership in 1984.

I would like to stress that only through full co-operation, understanding and goodwill are we able to succeed. Team-work and co-operation between industry and government are a must. I am confident that with the collective information available, no one will take lightly the need for management of all wildlife in Canada, involving industry and government. I feel that we should all accept our responsibilities before it is too late, and act accordingly.

Case studies of team-work (6)

SUMMARY OF DISCUSSION

Y. Dubé (Quebec Ministry of Recreation, Hunting, and Fishing) said he would like to get more information on some of the new terms that he had heard. Mr. Giroux had talked about "anti-trappers" and also immediately after about "anti-conservationists". He said that he had trouble in reconciling those two terms.

A. Giroux (Ontario Trappers' Association) replied that they came to the same thing actually, except that anti-conservationists gave them more clout. Trappers believed in the sound management of a resource, and anyone they felt was opposed to conservation through management was an anti-conservationist.

M. Hummel (World Wildlife Fund Canada) wished to comment on the Hon. Nellie Cournoyea's remarks. She had given a very nice presentation of the system within the Northwest Territories HTAs, and the work that was being done in terms of co-operation with the users. He predicted that it would be very important for both the Yukon and NWT to build some strong bridges with southern-based conservation organizations that were sympathetic to the wildlife situation "north of 60". There had been an unfortunate polarity and some splitting, particularly where native communities had identified animal welfare groups as being a tremendous threat to their livelihood, but in the course of doing that there had not been the same casting around for allies from the South, and perhaps even international organizations, that were prepared to be supportive of the situation in the North. In his experience, there was a great deal of misunderstanding and criticism, particularly from European-based conservation organizations, of the fact that there still was a significant population in Canada that depended on wildlife for their livelihood in one way or another. He assured those present that he had spent too much of his time trying to explain that to his own colleagues in the WWF. So he offered a note of caution: that they should not burn all of their bridges behind them. Some linkages should be built with southern-based and international conservationist organizations, as well as with the Fur Institute, that could be very supportive of the case that NWT and the Yukon were trying to put forward, particularly for native users of wildlife.

N. Cournoyea (Northwest Territories Department of Natural Resources and Information) replied that, in trying to put their case forward, they had pointed out to people in the South, as well as on the international scene, that most of the people who harvested and made use of the renewable resources were not very sophisticated people, and neither did they have an economic base to deal with those very complicated, sophisticated regimes that were going on. They had tried in the past to deal with this, but had done it on an ad hoc basis, in terms of sending some of their people over to the European countries and to some of the other places. They did not find that entirely successful, because it had no continuity. They were attempting to take things in their stride and deal with it in the best way they knew how. One of the ways, with their limited resources, was to support the Fur Institute of Canada and build a very small sophisticated group as a basis for telling a particular story.

Certainly, they were very concerned about what it was doing to their economy, and were aware of the St. Lawrence seal-pup revolution. As it went on, they

really did not express themselves as well as they should have, other than on the ad hoc little excursions to faraway lands, but they were trying to support and encourage their working relationship with other provinces that had sympathy and understanding. Almost all of the northern parts of provinces had a large population that depended upon the harvesting of renewable resources. They in the Northwest Territories tried to express to everyone that it was not in their best interest to do anything to damage it, because basically, in most of their communities, they did not have an alternative. This was where people had relied on the resource for what they ate, particularly for protein, and it was not in their interest to destroy it. They were trying to learn, but certainly needed a lot of help.

K.A. Brynaert (Canadian Wildlife Federation) said he was rather interested in one of the Minister's opening remarks, where she said that they were really pleased to be recognized in a national forum. He had heard exactly the same comment expressed 5 days ago at the CWF's annual meeting, when they took the Yukon Territory into their federation as a fully affiliated member. He suggested that the CWF, and indeed the World Wildlife Federation, would invite and encourage and assist any organized group within the territories that would join with them, trappers' associations, or whatever, so that they could perhaps provide part of that national voice for them in matters that concerned them. On behalf of the CWF, he had made several trips into their country to talk to groups, and perhaps, with the support of someone like the Minister, they could get someone to join with them and have their views known in a national forum.

N. Cournoyea said that she certainly appreciated it. She had been trying to read the material and understand what all those groups were--there were so many. It was good to know that they had friends, and they were making efforts through the people who worked in their program, as well as the Trappers' Federation of the Northwest Territories, which had tried to send a limited number of delegations to various conferences. She thanked the CWF for their offer and said she would take it back home.

Y. Dubé thought that, in the Northwest Territories, they were very well placed to teach people in southern Canada a lot of things about the cultural and spiritual values of wildlife. Not much was heard about that today, but he hoped it could be tomorrow.

J. Cinq-Mars (Canadian Wildlife Service) said that he would like to direct two questions to Michel Cantin regarding Quebec's system of managing Crown lands, and fishing and hunting operations by NGOs. Could he tell them briefly what were the advantages for the users going to those organized lands (ZECs) as opposed to Crown lands, and what were the specific protective mechanisms that those lands offered over normal Crown land that was managed by his department.

M. Cantin (Quebec Wildlife Branch) replied that he thought the main advantage that the user could hope to find in frequenting those places was really in an established system that ensured the wisest possible use of the area and its resources. For example, a quota was established for fishing in most of the lakes controlled by a ZEC, and in each of the major lakes. A system of compulsory registration was set up for each area so that they monitored the catches that were taken on each outing. At present, they could set the catch for each of the largest lakes and, once the limit was reached, halt fishing on the lake in question so as to ensure that the fishery could continue for many years to come.

On the other hand, obviously on Crown lands the only limit they could hope to see was the general limit laid down for the season. Thus, in the case of ZECs, they had a policy that was much more flexible; it could be applied to a single lake or to a series of lakes. In the case of hunting, he continued, the difference was much more blurred and narrower. Up to now, there was no quota on hunting. The problem occured mostly with native hunting, and possibly the situation could change. At present, the only limit for ZECs was the hunting season. It was possible for a ZEC to have its season shortened or made different from the ZOUM.

B. Bell (Northwest Territories) said that he had enjoyed Mr. Cantin's paper very much; it had described a sophisticated system, a model they would like to examine from their own perspective. He then asked him to explain why 650 zone administrators were needed to manage 66 controlled harvest zones (ZECs).

Mr. Cantin replied that he thought they had decided to establish 66 units at first because of existing demand. They could have had more ZECs, but the number corresponded to popular demand by existing associations, or those that were newly started. The only ones in existence were self-regulating, and they were those 66 ZECs. As for administration within each ZEC, the constitution and rules of each association set the number of administrators they wanted on their board.

T. Lash (Canadian Wildlife Service) noted that he was in the Wednesday workshops, dealing with failures rather than successes. The DU presentation had certainly pointed out some pitfalls; the kinds of things that could be avoided. He wondered if the other panel members would be kind enough, not necessarily to point to failures, but perhaps to steer them to some of the things that they thought might be pitfalls for team-work, particularly in the Northwest Territories, in Quebec, or with trapping.

A. Giroux said that he could only see success through team-work and co-operative efforts by government and associations. If they were to achieve their objectives, team-work was what they were looking for. As for pitfalls, they did have problems and had to deal, negotiate, and bang a few heads, but they got along and were accomplishing things.

R. Cockerill (Ducks Unlimited Canada) said they had had lots of failures, but also lots of successes that they were proud of. They hoped that things would just get better. He was from the trenches, so was not aware of what had been going on at the upper level, and it was really comforting to know that Habitat Canada was getting off the ground and they were going ahead.

A. Giroux added that one of the problems they had been faced with was regional differences in the provinces, for example, in new regulations or trapping-season adjustments that, for various reasons, differed from region to region.

N. Cournoyea thought that one of the things in the Northwest Territories was that the people were there before the game-wardens came up. People did not have a lot of ability to get around, so what they did was very much for conservation of wildlife, because that was for their well-being. One of the problems and pitfalls that she saw in the negotiations was in trying to get the user involved in a meaningful way. Sometimes they had problems when the politicians did not want to release their control, maybe to a lower level. It was fine to

ask people to take the responsibility, but if they only let them do all their dirty jobs and the political regimes held onto the ability to administer, that was a problem.

They did not have as much difficulty in dealing with a problem when the management zone for a species was within the Northwest Territories, but when they began to get into other jurisdictions, often the political jurisdictional problems were more important, it seemed, than dealing with the well-being of the wildlife. The reason for getting together was often lost because the politicians did not want to lose control over their domain. When they got people involved, some of the pitfalls were in not responding to them. They dragged their feet and discouraged people, and did not give the continual response that they should.

K.A. Brynaert suggested to Mr. Lash, who had asked for examples of failure, that not having a native person sitting at that table was a very obvious failure. It was not because they were not asked, but that they did not attend. That was something that they could probably spend the whole panel session discussing.

Workshops

PERSPECTIVES ON TEAM-WORK IN WILDLIFE MANAGEMENT

Dr. P. Bidol
University of Michigan
as Motivator

I want to be very blunt and share with you some of the kinds of pains and traumas that you can experience, along with the joyful outcomes, when you collaborate on inter-disciplinary teams. You will also discover, as I speak, that I have a very broad definition of team-work--and a lot of what you are already doing would be classified as team-work. However, I think if we can do what we usually do in natural resource agencies, non-governmental organizations, and industry when we collaborate in an explicit way, we will interact more effectively and produce outcomes that are mutually beneficial.

My definition of team-work is that "you have a shared goal and enough inter-dependence that you feel you have to work together". I think team-work is a continuum. As I have spoken with many of you, it has seemed that some of you had in your head an idealized version of team-work in which people worked together, had shared values, positions, and interests, and walked off into the sunset together under a rainbow; and that if you did not have all those elements, you did not have successful team-work. I really think that it is important to realize that team-work is a continuum that ranges from consensus interactions to structured bargaining.

If you can examine the realities of team-work, you will be able to have real integrated management and not just lip-service. In my consulting in the United States and Canada (through the University of Michigan's Environmental Conflict Project and my personal consulting), I have discovered that both countries, in industry, governmental agencies, and non-governmental organizations, are frequently talking about integrated management in the '80s. Your "Wildlife policy manual" is an excellent example of team-work and integrated management. It is a success that many agencies in the United States should study. However, I am not sure that you understand why you were successful.

Achieving a balance

In defining the operations of successful team-work, I use the acronym IBPSB for "interest-based problem solving and bargaining". IBPSB is based on the position that agencies' teams need to interact without a positional bargaining stance (where you come into the interactions with the bottom-line position). Teams, as much as possible, should use "interest-based problem solving and bargaining". The framing of potential interests between the bargaining parties will help them balance the short- and long-range wildlife needs with those of other resources. (See Appendix I for an outline of the IBPSB approach.)

How do you actually balance economic and social factors with natural resource factors in an IBPSB approach? Through prior analysis, you utilize scientific data, public and private needs, and your strategic management plans to design

options that are mutually beneficial. As a result, the parties that are interacting with you will usually think that all parties have the basic core of their interests represented. This type of approach, if you can do it more consciously, will usually help reduce the fragmented goals and actions that are typical of most inter-agency interactions.

In my work consulting with the public and private sectors on IBPSB, I see in the '80s a tremendous need to understand how agencies can organize themselves so that they can solve problems creatively, both internally across their divisions and externally with other organizations. Their aim is to reach their interests and goals and, as much as is feasible, the interests and goals of the other organizations.

Successful IBPSB

An examination of the examples of successful IBPSB will illustrate how to interact creatively on inter-agency teams. I want you to understand that, when we examine these examples, we are not talking about idealistic programs but real situations.

The first example occurred in Michigan, where there is an area near Traverse City called Sand Lakes; it had been designated as a "quiet area", and some oil companies wanted to drill there. At the same time, there was competing use from snowmobilers, cross-country skiers, back-packers, and hunters. There were a lot of disputes about what this area would be used for. The Department of Natural Resources in Michigan, the Department of Commerce, several oil companies, and several citizens' groups interacted in "interest-based problem solving" using the method of "ad hoc bargaining", which is not considered a normal regulatory process. This ad hoc process took about a year and a half. The parties did not have to go to court. With the assistance of a third-party consultant, they were able to work out a solution where all these parties felt that they had met their needs. They had to do many things that I know have occurred in Canadian natural resource agencies. They switched some land. The oil companies purchased some other land. They switched some fiscal resources to do different types of things. Therefore, they were able to interact in such a way that they could reach a good solution.

Another more explosive situation in Michigan centred on the Pigeon River Forest. This is considered by many to be a unique resource: a beautiful forest area with the largest elk herd in the USA's Mid-west. When the oil companies wanted to drill there, the citizens' groups and the natural resource agencies took them to court. There were protracted court battles and no one was getting what they wanted. Finally, when the last litigation was occurring, the parties used policy dialogues in an inter-organizational team to work out some mutual agreements that were then fed into the litigation system. Therefore the dialogue team-work resolved the situation.

Last year, in Michigan, some citizens' groups were very agitated because the forest near them was being clear-cut. These groups were going to take the state's Department of Natural Resources to court. They also had several legislators who were about to pass legislation prohibiting clear-cutting in that type of situation. Instead of litigation or legislation, all parties agreed to work

together in a format termed "integrated policy dialogues". They were able to reach agreement and are still interacting with the Michigan Department of Natural Resources to help them develop models of "team interactions" that would enable citizens, natural resource agencies, and industry to interact together and develop optimal integrated management models.

Another example that I am involved in right now is in Florida. The Governor of Florida is restoring the Everglades to the water-resource levels of around the turn of the century. I work every 2 to 3 weeks with an agency called the South Florida Water Management District. This is the lead agency that had channelled the Kesiminee River, producing the present Everglades water situation. This agency also influences the major water levels for Miami, Fort Lauderdale, Lake Okiechobie, the farm interests of southern Florida, the mango-growers, the orange-growers, and the beaches that a lot of Canadians visit in the winter. The whole of southern Florida is under this agency's mandate, and we are working with them to help them totally restructure their agency so that they can produce high-quality water management and positively respond to the needs of citizens, industry, farmers, and the natural environments.

If the Everglades water levels are restored, several other interests will be affected: Miami's land development growth, farmers' use of surrounding land, and several home-owners in the area in between will no longer be receiving adequate water, or else they will be flooded out, depending on which site they are in. All of those parties are not "real happy" about restoring the Everglades, and so we are helping the district to use "interest-based problem solving" to create some solutions.

When we talk about team-work as a way for agencies to respond positively to external stake-holders, I do not want you to think IBPSB is the only way for natural resource agencies or non-governmental agencies, or any of the other parties, to respond to external pressures. Your other traditional problem-solving approaches such as litigation are viable for particular situations. Regulation hearings are problem-solving approaches. My hypothesis is that you need to be able to be open to using the appropriate problem-solving approach that will work, and create the best solution for a given situation. Most of the time, if you try an "interest-based problem solving approach" by itself, or in combination with the more traditional approaches that you use, you will get a better result.

As a Canadian example, a colleague from Boston used an "interest-based problem solving approach" to help design the decision-making process for a hazardous-waste siting for the Province of Alberta. I do not know if that has been viewed as successful in Alberta, but I do know that he views it as a very successful project.

Other Canadian examples that I have identified from reading the background literature that was sent to me are done by the Canadian Wildlife Service. One speech last year, given by a member of CWS, mentioned acts like your federal "Wildlife policy", working on the North American Waterfowl Management Plan, and the Protocol needed in getting that ratified by the United States on the migratory birds issue. Now, many of these are not yet resolved, but it seems to me that you are using an "interested-based problem solving approach" in a very effective way.

Taking the lead

We are talking about most of you in the room becoming engaged in "interest-based problem solving", and there is one problem with that. Most of you went into your profession to get away from people. Some of you are shaking your heads "yes", and some are shaking them "no". What I mean is that you were really attracted either to wildlife, forest, or scientific matters. You did not see that as a scientist, a biologist, or a wildlife manager you would have to deal a lot with people. Most of you have risen to the rank of manager or administrator. All of a sudden you have had to at least figure out how to manage the scientists who report to you. Some of you manage very successfully. Others wonder how they got there. We normally promote people in natural resource agencies because they are fantastic scientists. Then, all of a sudden, they get to the top of the agencies and they have not had a lot of in-depth training in how to be an administrator. Nevertheless, most of you have figured out how to work with other wildlifers, and then you have extended yourselves out to foresters.

We are saying that successful wildlife managers have to reach out in a problem-solving approach; and, as they do their permitting, siting, and wildlife management, they have to interact with non-governmental agencies, other agencies at the federal and provincial levels, industry, municipalities, and townships. How do you do that? You cannot just be told to do it. I think it is admirable that you have had so many successes. I really believe you need a lot of training, and we need to have organizational guidelines and policies to assist you. It has been my experience, in the years that I have been doing this work with natural resource agencies, that because people have not been given the training, and because the organizations do not have formal policies and procedures that support this type of team-work, those in the agencies who take the risks to be the lead people in working out these collaborative team agreements (even if they are viewed as excellent agreements) are not rewarded within their agencies. They are viewed as mavericks and often do not get promoted, or get laterally transferred so that they will never have such a success again.

So, as we talk about team-work, I think that you also need to work within your own organization about protecting those of you who are willing to do these new kinds of work. In the examples I gave, I know for a fact that the lead people within the agencies that worked on them were not rewarded. The agencies were happy that the end results were achieved. However, they were not happy with those mavericks who had accomplished the solutions. To do collaborative team-work within the present way that most natural resource agencies are structured (and most other organizations in our society) means that you are bucking the system. We do not reward people who persistently buck the system until the system is changed. If agencies desire more collaborative team-work to occur, natural resource agencies, in both the United States and Canada, need to do more restructuring and more reorganization to support these efforts. This is not a total reorganization but a fine-tuning of your agencies.

As an example of what needs to be restructured, I would like to use John Baird's example. He seemed to make a lot of sense as he was talking to me about what "interest-based problem solving" meant at the provincial level. He was saying things like, "Well, if the public wants to get more involved," (I think that he also meant other groups, perhaps other agencies) "you have to look at how you share authority and responsibility and accountability, and if you can't work those out, you can't have a good result". He is absolutely right.

The reason most of the people I am talking about, who produced good results, have not been rewarded back in their organizations is because their agencies' policies and procedures do not support extensive IBPSB efforts. The results are fine, but where is the accountability? Where is the actual real authority? Where do you get the responsibility? Where do you get the resources to implement the fine agreement? If you implement that agreement (perhaps saving a lot of litigation), but it takes resources away from a wildlife plan that had been just developed for Region 3 in Michigan, are you happy that this guy went out there and got that agreement? You like the agreement, but do you like the follow-through? Do you like the mitigation efforts? So, it really means restructuring, within your own agency, how you do problem-solving, how you do strategic planning, how you budget for the year, and how you set the priorities of your projects.

As an example of restructuring an agency, let us examine the South Florida Water District. In their efforts to develop organizational structures to support IBPSB, they changed their mission statement. Then the managers did not want that to be "for real". They went back and realigned the projects that they were going to do for the coming 2 years, and the budget allocations, and the type of money they got from the federal level, to be consistent with their current mission. So now someone who uses IBPSB will not be a maverick; will not drastically change the direction of his or her own unit.

Traditional and non-traditional

It almost sounds as if I am on a soap-box for "interest-based problem solving and bargaining". Let us examine some of the advantages and disadvantages of traditional approaches that natural resource agencies might use to interact with other groups, or the groups might use to interact with them. These are procedures such as litigation, regulatory hearings, public hearings as they are normally structured under the environmental review processes in both countries, and legislative reviews. The advantages of these traditional approaches are that the disagreeing parties can work separately. You do not have to communicate directly with each other, and you can use whatever leverage, and whatever back-room influence, and whatever you want to get what you want. Sometimes that is an advantage. Also, the parties that are involved in this situation are those that are the most assertive, and usually the most informed. They are perhaps the more privileged parties in our societies. The involved parties tend to be the same, and they are familiar with each other, so they do not have to do a lot of direct interaction with each other in the court, but in the back-room they sort of know each other.

As an example, over the years Ducks Unlimited has known how far it could "push" the other wildlife organizations and vice versa. You get to know each other. The traditional system tends to protect the established relationships and the policy directions, so that when you get a court decision or regulatory appeal or a public hearing, normally it will feed into your status quo, the way your agency does its business, so it is not really disruptive. You may not even like the result, but you know how to handle it since it fits into your normal on-going procedures. That is an important advantage. The adversarial relationship results in a healthy testing of the ideas and the arguments.

The disadvantagesof these systems are that the disagreeing parties often assume extreme positions just to maintain their positions (not their mutual interests).

They do not enjoy face-to-face problem solving. Those with minimal access cannot use this system, so you often have them protesting (demonstrations or sit-ins). All parties do not have the same access to information, and the present practices favour those who know how to use this system.

The non-traditional approaches--the collaborate team-work, the interest-based bargaining--have an advantage in that you have a very systematic information analysis. You really do get agreement on the data; if you do not, this kind of a process cannot work. You give mutual consideration to the long-range effects on all parties. You have more effective communication among the representatives, and you do develop integrative goals and integrative management.

Now, the disadvantages are that these types of processes take more time and sometimes more money. People often are not trained in how to do it. Agreement might not be acceptable to the organizations of the representatives, so that you could have John sitting down with a federal-level person and coming up with this great idea of how to do natural resource management, and he goes back to his colleagues and they say, "Boy, did they brainwash you!". So one of the difficulties in engaging in this is: How do you keep contact with the people you are representing? If it works, it normally means an improved climate for teams.

To do this type of work, what are some of the necessary conditions? The political climate has to be right. The key stake-holders have to perceive that they get benefits from engaging in this process. You need to have most of the public accepting this process, or they will say that government officials are selling out. If you cannot frame this process in such a way that it is acceptable to most of the public, do not bother doing it.

Regarding the issues, you need a moderate to high level of perceived importance for the issue. Otherwise, why put in so much time and energy? The people have to feel that the problem is solveable. If your position is such that there is never to be any use of nuclear power in any shape or form, then you would not be likely to go to the table to figure out how to design a moderate level of nuclear use. As a stake-holder, you have to feel that the issue is negotiable.

Each party has to have an organizational base. This is where a lot of you have made a mistake in both the United States and Canada. Natural resource agencies often bring people to a task force or round-table who are isolated from their organizations. You come up with a great agreement, but who is going to support it? So even though it takes longer and there is more fighting as you interact, you really need to come from a power base. You really have to represent your agency or your organization. You cannot just be an individual sitting at the table.

However, in representing your organization you need to do so at the level of saying what your interests are, not what your position is. In one of the papers that I read, it said something like: If we get the federal and provincial people together to do joint team-working, let us not start with the mandates, because that will get us into our positions; let us start with all the tasks that need to be done and figure out who should do them. This is great. A lot of this "zero-based organizational restructuring" is beginning to occur in Michigan and Florida. It is beginning to cause a reduction in overlapping jurisdictions.

Using IBPSB

The first step in the IBPSB type of team-work is to train yourself within your organization. You have not been trained to do it. In the Michigan Department of Natural Resources, I am called the "Elk Lady" by some people because I have worked with a team of foresters, wildlife managers, and policy specialists on an elk hunt that is supposed to occur next year in Pigeon River State Forest. Those people made it very clear to me that the forestry unit and the wildlife unit did not normally sit down and collaboratively do something like this. So, people within the same agency had to learn how to work together on an inter-disciplinary team. They produced a solution that was acceptable to their agency, hunters, farmers, and most environmentalists.

Second, there are a lot of successes in the USA in agencies that use "round-tables" at policy levels. For example, in the Denver Metropolitican Water Table, how could we get together in such a way that we could decide who got what water? This had implcations for industry, the householder, and the wildlife, forests and recreational interests of the Denver area. Key stake-holders have worked together for several years using this type of approach, and they have come up with an agreement that most of the parties were willing to sign. Some portions of it some parties would not sign, but they were willing not to sign such portions and still support the overall agreements and sign those portions.

In conclusion, if you want to do team-work from an interest-based approach (I do not know how else a natural resource agency can do it in the '80s), you have to ask yourself these types of questions before you get into IBPSB:

(1) Will the choices link? Will the choices of ad hoc bargaining, round-tables--whatever you choose to engaged in--will they link your conflict-management strategy to your regular decision-making process? If they do not, you may get an agreement you like, but you are going to cause the people in your agency who worked on this to be viewed as mavericks, and you are also going to cause great difficulties in implementing the agreement.

(2) Will the choices link the procedures to other environmental processes such as environmental assessments? Will the processes include procedures to reach agreement on the data? The United States Fish and Wildlife Service used, in a variety of situations, and I think very successfully, the process that was developed by a Canadian named Howling on data agreement. It is a computer modelling system, and it was not designed actually to help parties negotiate with each other, but in several places in the United States it has begun to be used to look at actual options. You need something like that to help you get agreement on what the data are. If you do not have a common data base, these processes will not work.

(3) Will the choices support integrated resource management? You cannot just be pie-in-the-sky when you sit around the table together. You have to face issues like: What would be the impact if we formed a new agency to do it? Are there any new legislative requirements? What will this do to the budgets of the existing organizations? Is this the impact that we would like to have occur to the budgets of existing organizations? If we have an umbrella objective or multi-agency approaches, how do we clarify the rules and the interests, and reduce the overlap between the agencies.

I think, in a lot of your sessions, you can begin to look at that type of an issue. Areas such as the integration between forestry and wildlife in Canada could be something that a group like yours could really examine. I think you need to do something like "zero-based mandates and operations" to really look at what each agency does and what needs to be done. You have to do something to produce an administrative climate that fosters and encourages IBPSB. You need to have non-governmental organizations and industry involved early, not at the end, in this kind of a process. You need to celebrate your differences as well as your similarities. Then you will be able to create viable solutions.

APPENDIX I

Outline of "Perspectives of team-work in wildlife management"

I. Introduction

- Team-work between and within public and private sectors is enriched by collaborative problem-solving approaches inherent in "interest-based problem-solving and bargaining" (IBPSB)

- IBPSB supports integrated resource management by:

  (a) balancing short-and long-range wildlife needs with those of other resources,

  (b) utilizing scientific data, public and private needs and goals, and strategic management plans to produce outcomes that are mutually beneficial,

  (c) reducing fragmented goals and actions.

- IBPSB is collaborative aspect of conflict management approaches. IBPSB includes processes such as policy dialogues, ad hoc bargaining, third-party facilitation, and integrative task forces.

- Other typical conflict management approaches are litigation and administrative appeals.

Examples of IBPSB and other conflict resolution techniques are:

Situation	Stake-holders	Conflict resolution techniques*
(1) Sand Lakes, MI: oil vs. recreation	Dept. of Nat. Res., commerce, Oil Co., citizens' groups	Ad hoc bargaining
(2) Pigeon River, MI: elk vs. oil	DNR, Oil Co., citizens' groups	Policy dialogue and litigation
(3) Allegan Forest, MI: clear-cutting vs. wildlife vs. recreation	DNR, citizens' grps, forest industry	Ad hoc bargaining, integrated policy dialogues

Situation	Stake-holders	Conflict resolution techniques*
(4) East Dade, FL: Everglades restoration vs. industrial growth	Several agencies, industries, citizens' groups	Ad hoc litigation, policy dialogues
(5) Alberta, Canada: hazardous waste siting	Communities, agencies, industry	Issue dialogue, ad hoc
(6) Guidelines for policy for wildlife in Canada	Several agencies and public sector	Ad hoc and policy dialogues

* Most used third-party facilitator.

II. Interest-based problem solving and bargaining (IBPSB)

(A) Advantages of traditional decision-making systems (litigation, regulatory hearings, legislation):

(1) Disagreeing parties can each work separately to communicate and influence using their own information, resources, and styles.

(2) Involved parties are those that are most informed and assertive.

(3) Involved parties tend to be the same and at least familiar with each other.

(4) Involved parties are familiar with the decision-making system, and more or less comfortable using it to their advantage.

(5) Traditional system tends to protect established relationships of parties and policy directions.

(6) Adversarial and competitive relationships can result in testing of ideas and arguments, and strengthening of winning parties.

(B) Disadvantages of traditional decision-making systems:

(1) Disagreeing parties often assume extreme positions just to maintain their positional interests.

(2) Disagreeing parties often do not enjoy face-to-face discussion and problem-solving.

(3) Access to decision-makers is geared to those who are aware and already organized.

(4) Those with minimal access often use litigation or administrative appeals.

(5) Information is not equally available to all impacted parties.

(6) Differential access and perceptual distortion cause the positions and data of those who have most access to be favoured.

(7) Present practices and presently favoured constituencies are not adequately influenced by emergent concerns and less powerful constituencies.

(C) Advantages of non-traditional approaches to dispute resolution:

(1) Systematic information analysis processes influenced by all parties.

(2) Mutual consideration of diverse interests of all parties.

(3) Effective communications among the representatives and between the representatives and their groups.

(4) Development of integrative goals and mutual interests without losing integrity of any party.

(5) Formation of more pragmatic, equitable, mutually acceptable alternatives.

(D) Disadvantages of non-traditional approaches to dispute resolution:

(1) Required time, money, people resources are too much in relation to other needs of party or produced results.

(2) "Agreement" is not acceptable to party(ies), so representative(s) and process are discredited.

(3) Produced solutions strongly conflict with existing conditions, and change is not realistically possible.

(4) Improved climate and relationships delegitimize actual differences of parties, masking other important issues.

(5) Collaboration prevents or undermines a party's effort to mobilize its members to learn about a conflict, and influences its outcome.

(E) Necessary conditions for IBPSB:

(1) Political climate-

- Key stake-holders to dispute perceive benefits of engaging in the process, and there is a low degree of polarization among major parties to conflict.

- Timing of process arranged so deliberations and produced options able to influence policy formulations, and there is enough time pressure that parties feel need to settle the issue.

- Supportive acceptance of process by most of external public.

(2) Issues and procedures-

- Moderate to high levels of perceived importance of issue, and it is defined enough to focus interactions.

- Issue is amenable to problem-solving and bargaining from viewpoint of key stake-holders.

- Procedures of interest-based bargaining process agreed to by all parties before they interact on issues.

(3) Parties

- Each party has or is forming an organizational base.

- All parties must have power base from which to engage with the other stake-holders, and there are low to moderate differences in power of the parties.

- Parties must realize that the cost of not resolving is prohibitive to their future concerns.

- All have stake, realize interdependence, and voluntarily engaged in process.

- Parties must have capacity to understand and advocate their interests, and they are willing and able to delegate problem-solving negotiation authority to their spokespersons.

III. Utilizing IBPSB for team-work within organizations

- IBPSB need to be linked to existing procedures, policies, and values of organization.

- South Florida Water Management District, lead agency for water in all of southern Florida, is in second year of reorganizing to utilize IBPSB. In the words of its executive director, it is using these team approaches because:

  (a) We have been reactive, on the defensive, to public and private sector.

  (b) Cross-departmental teams are more fully utilizing our employees' expertise.

  (c) We needed sure-fire method to incorporate concerns of private sector and special interest groups into our decisions.

- South Florida Water Management District initiated IBPSB by forming two new departments:

  (a) Department of Resource Coordination to use IBPSB with other public agencies and the private sector.

  (b) Resource Policy Unit to implement cross-departmental teams.

- Recommended roles of external and international collaborative teams:

  (1) Participate in appropriate ways with other agency staff and with governmental units and other special interest groups to facilitate internal and external problem-solving by teams.

(2) Assist in identification of key public issues.

(3) Assist in prioritizing of public issues for top management and the board.

(4) Assist departments in identifying and responding to public issues germane to them.

(5) Provide forecasts of social/political trends.

(6) Identify policy implications for top management.

(7) Review plans for sensitivity to emerging key issues.

(8) Participate in refining strategic plans for general operations at organizational and department levels.

IV. Utilizing IBPSB between organizations

Examples of IBPSB that have used a variety of collaborative approaches include the following:

(A) Denver Metropolitan Water Round-table, which has developed options for water use in Denver area. It has involved agencies, local communities, industrial interests, agricultural concerns, and several special-interest groups. It was sponsored by Governor and facilitated by professional mediators. It used a multi-level task force process and all involved interest groups developed water-use plans. Technical experts validated data. All plans were compared and a mutually acceptable plan was developed. The outcome was an agreed plan in which some portions were endorsed by all parties and others were only agreed to by two of the major groupings.

(B) Michigan Policy Forum is being developed to protect the natural environment; strengthen the economy of the region; and foster co-operation between citizens, industrial proponents, government agencies, and unions. It is being developed and will create collaborative mechanisms for permitting and siting economic development projects, such as developing oil interests in state forests.

(C) Develop guidelines and procedures for anticipating conflict in Michigan Game Area Management; will begin in fall of 1984. It is designed to enable the Wildlife Division to develop management plans that balance the long- and short-range needs of wildlife, and needs of environmentalists, industrialists, hunters, etc.; and are integrated with other natural resource management goals.

V. Conclusion

The choice of which IBPSB approaches to utilize is based on the following considerations:

(1) Will the choices link the conflict management strategy to the organization's regular decision-making procedure?

(2) Will the choices link the procedures to other environmental process, such as FEARO?

(3) Will the processes include procedures to reach agreement on the data?

(4) Will the choices support integrated resource management?

(5) Will the choices allow the possibility of using a full range of conflict-resolution approaches?

SUMMARY OF DISCUSSION ON MOTIVATOR'S SPEECH

T.C. Dauphiné (Canadian Wildlife Service) said that the motivator had not addressed the specific exercise that they were beginning. Would she have any hints or guidelines, advice about how they should approach it? She had given them a lot of material, and it was really interesting, but the questioner, for one, had not really had a chance to address it, and was not quite sure of understanding it all. It would be nice to go away and think about it for a few hours, and then start their exercise.

P. Bidol (Motivator) replied that they needed to be careful in all their interactions to acknowledge what their interests were. Each of them should ask what they wanted, representing their organizations, as they interacted with the others. They should know their interests and try to make sure that they did not slip from an interest into a position. In other words, they should know the bottom-line outcome that they wanted, but also the interest that they wanted to protect. It was a whole different mind-set. Second, they should make sure that they let everybody's interests get out, because what often happened when people sat down together--and she would be curious about it as she moved from group to group--was that whoever spoke first, or whichever agency had the most prestige in the room, or whichever person had the highest rank in the room, or those types of things, often caused their ideas to have a rainbow effect. It was very important, if they were going to do collaborative team-work, that they get all of the ideas out first: do a brainstorming, do a green-lighting, do a round-table effect, where they went around the room without discussion and got all the major interests out.

Then it was also very important that they form sub-groups within their group. She would even recommend that they say: "It sounds like you three are thinking alike, and you three are; why don't you take five minutes and go and refine your positions, and develop some options for how you think all of you could interact together. Then come back and share it". They could then understand what that would do. It would sharpen the differences, with the faith that the sub-group had made an agreement that they were going to hang in there together to do it. Then they would come back and share their sub-group's interest perspectives: their interests were sharpened, their ideas on how they could resolve them were in place; they had seen some options and had begun to solve problems and negotiate with each other right in the room; not negotiating from an adversarial position, but from a strong interest position.

M. Hummel (World Wildlife Fund Canada) said that he was interested in Dr. Bidol's comments about trying to get agreement on data. Often, if there was agreement at that level, they were talking past each other because, in his experience, there was often a range. In other words, he would think there were 300 beluga whales, and another would think there were 1600, and the interests, or mandates, or perhaps the positions of their respective agencies caused them to prefer one end of the range. They had said that in general it was nice to get agreement on data. That was a nice generalization, but how did they do it? He just offered the observation that one way to do it was to involve the groups that had a potential conflict in the gathering of the data, so that they could not dismember each other's methodology. The potentially conflicting parties were in the field and saw the same whales, and agreed or disagreed on the methodology. So

there was a greater likelihood of their agreeing on the data. He asked what would Dr. Bidol's experience be on getting agreement on that.

P. Bidol agreed with Mr. Hummel. The example she had given from Howling was an example of that, where they had people from all the different interests getting on sub-teams and each sub-team generating a data-base for a piece of the overall data. They had to end up agreeing on the data because they helped to generate it together. Now sometimes they could not get people out into the field. It might not be that kind of a wildlife situation. In the Dade case in Florida, there was a big disagreement about how many birds were actually being impacted, and how many nests were being affected, and whether it was natural or not, and all that type of thing. They were doing a lot of integrated team-work with people from different perspectives gathering that data right now.

That was what they did with the elk situation. The people that were opposing the hunt said that the Michigan DNR did not know how to count elk; that they had been wrong in the past on elk counts and they were wrong right now. They got some teams from those who agreed with the data and those who did not, and they went and did an elk count, and that was a very helpful process. They had ended up agreeing on the figures. Somebody still might take them to court, but right now all the major parties that had opposed an elk hunt in the past, supported it. Many of them would say they did not support hunting in general and they did not like this one, but they understood that this thing needed to go ahead. They had to keep their public image. Some of these groups never supported hunting in the past, but they had public agreement from all the parties, and right now there was an elk-herd reduction scheduled for next winter.

One thing she said she had not talked about very much was that sometimes they needed a third party, not one of the interested parties, to help them set up the procedures and to facilitate, just like the chairman of their present workshops. That was not dependency, and might even continue in the future after agencies were more used to this. At other times, they could train themselves to handle a lot of this type of team-work and interactions, so that they could do it themselves. What had been done was to go into a lot of natural-resource agencies and train the wildlifers and foresters in "dispute resolution through collaborative problem-solving". So they did need to be aware that sometimes they needed a third party. They probably needed to do some restructuring of their organizations if they were going to do this on a massive level, so that this could come in and produce an outcome that fitted into some slot within their on-going procedures.

J.D. Roseborough (Ontario Wildlife Branch) thought that this gave them some insights into some approaches to their workshop activities, and also some of their everyday activities. They had all started as professionals in forestry, biology, or mining, and here they were managing people or trying to. It was a remarkable transition.

P. Bidol said that one thing that needed to be thought about was that many of the people who would be affected by their decisions might not have the resources to engage in collaborative problem-solving, so that a lot of organizations had to figure out how they would pay a non-governmental agency to engage in this type of work. In a conference just held at the project last week in Michigan, where they were looking at the two significant emerging environmental issues for the State of Michigan, they were recommending a round-table. Many of the non-

governmental organizations said that if they did this, they did not have money to litigate, and they did not have a staff person available to raise funds for their organization, because it was time-consuming to sit in a round-table situation. So they needed to figure out how to fund key stake-holders to engage in this process with them, and how the funding could be provided in such a way that everybody still had freedom to proceed from their own interest base. The funding of these processes was another area that needed to be looked at.

Wednesday workshops

Introduction and comments on reports

S. Curtis
Chairman

I was a member of Workshop 5, chaired by Alcide Giroux, which was charged with analysing successes in team-work. As a team, we held a rather wide-ranging discussion and I am sure that the other groups did the same. Without wanting to take anything away from the rapporteurs to follow, it is fair to conclude that team-work takes on many forms. Dr. Bidol gave us many fine examples. I am sure others were discussed during the course of the workshop. By the end of this session, I hope that we can put some useful focus on this business of team-work, and provide a more circumscribed task for the Thursday workshops.

(The following comments were made after the workshop rapporteurs' presentations.)

Team-work is a complex thing, but it has been around for thousands of years. I think perhaps one of the finest examples of team-work is mutual grooming in primates, where groups of individuals pick head-lice from one another. I assume that there the need is obvious.

In examining the successes and/or failures of the various examples of team-work that we choose to identify here, we should try to distinguish between two points. First, the question of how well the team worked together. In other words, was it an effective team. Second, we should distinguish that from how well the team actually addressed the issue or problem for which it was constituted. Has wildlife benefited from the team's efforts? Was a better result achieved for wildlife? Those are two distinct things. One asks how well the team worked, and the other asks if we really did something useful for wildlife.

(The reports of the six rapporteurs and a summary of the discussion follow.)

WORKSHOP 1: NEEDS FOR TEAM-WORK

Chairwoman: L. Whistance-Smith (Ontario Wildlife Branch)
Rapporteur: R.C. Thompson (Manitoba Wildlife Branch)

Our group addressed the topic of the needs for team-work from the perspective of provincial, territorial, and federal governments, two consultants, a couple of private wildlife organizations, negotiators, and conservation organizations.

To start off, we had a round-table discussion on the definition of team-work, its type and its scope. It was our consensus that the topic should include the broad definition spanning all types of team-work between and amongst private and governmental organizations. Team-work was required for two or more interests to work together to achieve common goals that might not be effected or achievable if the interests worked unilaterally. Team-work could also resolve issues and

lead to effective projects and provide compatible solutions. Examples were provided of various projects involved with team-work, such as forestry, wildlife management, marsh and water management, seasons and regulations, land-use planning, and co-ordinated gas and mineral extractions.

It was agreed that team-work provided strength and credibility. It was also stressed that very few agencies could accomplish significant results if a specialized or vested interest was too short-sighted or narrow in viewpoint. Our group agreed that ventures without some form of team-work in this day and age were a rarity indeed.

It was also expressed that team-work was often time-consuming. It upset schedules because of the essential communication and dialogue that were required, but the alternatives in short-circuiting team-work were far worse. Outputs beyond or without the team involved a destructive process, because mandates or positions tended to become entrenched and have conflicting results.

About midway through our discussions, our group then addressed the topic again, and being really keen, we put kind of a "kinky" little twist to it and agreed that there were two distinct slants to be taken. The first was the needs for team-work, and the second was the needs in team-work. We then listed important factors under each heading and, at the risk of usurping tomorrow's deliberations on similar topics, I would like to go over these points with you.

(Mr. Thompson then displayed a flip-chart.)

The flip-chart

Team-work is needed:

- to achieve common goals that individually two or more organizations cannot accomplish as effectively; to allow the pooling of resources--we were speaking here mainly from the dollar aspect, where team-work allows agencies to contribute, whereas individually they may not have enough funds;

- to allow a group to issue somewhat objective statements without fear of being slammed by their bosses;

- to achieve a better product;

- in some cases because there is a legal obligation for team-work--here we had a discussion on the differences between team-work and negotiating, and it was the consensus that there were some cases where we were brought to the table more or less forcibly, and yet team-work ensued in some cases;

- to allow the pooling of brain-power and collective skills;

- to allow the airing of viewpoints that otherwise might not take place--there was a point here that team-work was one example of facilitating the needs of wildlife, because wildlife in this day and age needed all the help it could get; and if team-work will help that, then well and good;

- to eliminate obstacles;

- to allow efficiency and effective production, whereby groups are brought together, rather than use the scatter-gun approach of trying to get consensus all over the country;

- in the case of a committee, to provide considerable clout;

- to allow the resolution or avoidance of conflict;

- because, with changing roles, particularly necessitated by budget cut-backs, between the governmental and private sectors, it could be that there is de-emphasis on one side and a re-emphasis on the other side, thereby bringing about the need for team-work;

- because there are demands on organizations, either from their clients or from their mandate, that team-work is involved in--one individual in our group said that, purely and simply, we were advised that we were to work with other organizations;

- finally, to allow a very organized response to significant issues and problems.

The next slant to it was "needs in team-work". In order for team-work to come about, there had to be a problem to be solved. There also had to be the means to solve that problem--it could not be one that had no solution. There had to be interest and commitment from the participants, and along with that came meaningful participation from the people involved. Team-work, in the case of a committee, would have to show results, lest the members became somewhat disillusioned or discouraged. There had to be clear mandates, aims, and goals. There also had to be individual and team goals, so that they could be put in perspective.

Trust, confidence, and camaraderie were things that they hoped would come with team-work, but this was a very important aspect that had to be developed. The participants had to be willing to compromise. Also, there must be communication and information exchange and realistic expectations, so that results were achievable, and again would avoid discouragement.

There was a point made that abilities were brought about as a result of team-work. The collective team-work abilities were the real power, and this did not have to be legislated or mandated power that was given to a committee. The power that came was in the talents of the good people involved. Participants had to be willing to make a cost and time commitment to bring about an effective team.

There had to be an avoidance of stereotyping, so that people were not already second-guessed before they made their positions or their points clear. There had to be a full understanding of the interests of the various participants in a team, and there must be a mechanism in place to evaluate the abilities of the group and the dollar commitment. The team must be willing and able to listen. It must have leadership, and perhaps a facilitator to bring about a resolution and consensus from a group often involving some very talented people; somebody had to take the lead role. And finally, the facts from a committee had to be assimilated, so that joint positions could ensue.

Wednesday workshops

WORKSHOP 2: NEEDS FOR TEAM-WORK

Chairman Y. Dubé (Quebec Ministry of Recreation, Hunting and Fishing)
Rapporteur: R. Bell (Northwest Territories Department of Renewable Resources)

Our topic was the same as for Ross Thompson's group, and I think that we did pick up most of the points that they missed. At our morning session, our group tackled the theme by providing members with the opportunity to present those factors that were, in their view, the primary obstacles to achieving successful team-work; the resulting factors that were identified can loosely be divided into two general categories: those involving human qualities and those involving process.

Most group members viewed the personal qualities of those involved in putting together team efforts as being the most important. "Tact", "sensitivity", and "understanding" were frequently used words, and a number of people alluded to the mandate and the degree of comfort and security that individual team members felt within their own organizations as being very important. Past experiences of team members, either good or bad, with other co-operative ventures were identified as having significant effects on the success of the current venture.

With respect to process, many team members emphasized the need for all those who were involved to understand the problem that they were dealing with. The available background, or the data and the facts, and also the range of solutions that were possible, were important, particularly so that there could be a mechanism for identifying the commonality, or that much-desired win/win objective. The point was made that NGOs frequently found themselves having to take extreme positions in public to raise funds, and this subsequently limited their ability to move and negotiate in a team framework.

In our afternoon session, we attempted to focus on four problem areas. The first dealt with the use of words, and we were particularly interested in the use of words like "anti-trapping", "anti-hunting", and "anti-fur". I expect that there will be some discussion on this point. A number of people in our group felt that the term "anti-conservationist" was a dangerous one. They felt that in some ways it could certainly evoke a strong reaction and lead to fracturing a team effort rather than unification. There was a general discussion of word use, and the fact that proponents and opponents of a particular issue developed their own vocabulary, particularly of key words, and that the vocabularies obviously suited a particular point of view.

We discussed the idea of co-operation between governments from the perspective of whether the structures of government were themselves obstacles to team-work, and if that was the case, how it could be made better. We dwelt for some time on decentralization, and whether the transfer of responsibilities from one level of government to a more local level could have a positive effect on a team approach. There was however concern expressed that the result of that would be a patchwork of management. I think there was agreement that it could proceed, as long as it proceeded in a well-defined framework. The point was made that co-operation between levels of government was best promoted through contact between bureaucrats. Someone went so far as to say that politicians came and went, but bureaucrats were there to stay. It was suggested that governments at all levels should develop

their relationships of mutual trust with NGOs. However, concern was expressed that both sides would then have an opportunity to misuse their position of trust.

The point was also made that, if a co-operative project between government and NGOs went ahead and was a success, it usually ended up being a governmental project, and if it failed it was clearly the responsibility of the NGO. The end result of the discussion, though, was that advantage should clearly be taken of opportunities for exchanges of staff for committee meetings, conferences, and workshops involving NGOs.

Obstacles to co-operation

We then moved on to management plans and land-use planning as examples of team-work, and dealt with them from the perspective of what obstacles got in the way of that co-operative process. It was noted that the planning activity frequently went out of synchronization with the political process. That is, the initial impetus for the planning activity began under one set of political guidelines and came to a conclusion under another and, as a result, the product might end up on the shelf. However, it was also noted that the process frequently failed because those who were involved in it were planners, rather than those who were going to have the ultimate responsibility for implementing the plan. The group wanted to emphasize that, in their view, the process of planning was the most valuable result, rather than the eventual project, and also to emphasize that it was a dynamic rather than a static process.

Finally, we spent a few moments on communications and team-work. As happens with most groups of wildlife professionals, we recognized that we were not very proficient in developing a theme of team-work with the media. We were reminded that the information we were attempting to provide to the media should be simple, direct, succinct, and factual, and that we should try to avoid situations that allowed the media reporters and scientists to develop a sense of mutual distrust. Some time was spent dealing with the problem of how to sell good news. Finally, on that topic, it was strongly pointed out that all team-players must be well served by the media coverage, and if that did not happen, it could ultimately cause stress in the team. One method suggested to avoid that problem was to work out a very clear media-relations plan at the outset of the process.

Wednesday workshops

WORKSHOP 3: FAILURE ANALYSIS IN TEAM-WORK

Chairman: T.C. Dauphiné (Canadian Wildlife Service
Rapporteur: J. Hickman (Canadian Wildlife Federation)

Our workshop discussed failures in team-work and placed them under four main categories:

(1) attempts tried and failed, as examples of acts of commission;

(2) attempts not tried, as acts of omission;

(3) attempts made, but with limited sub-optional success; and

(4) others such as partial attempts at team-work that failed.

Failure is an entirely relative word; I guess it is in the eye of the beholder. I use as an example, without going into it, the recently cancelled seal hunt in the North Atlantic. Failure is a matter of degree and it is a matter of perception. Some of the failures that we discussed in general terms were:

(1) failures to accept responsibility and to exercise it; we felt that governments were constantly guilty of this failure; eg, the Protocol issue over the 1916 Migratory Birds Convention;

(2) failure to sell ourselves as wildlife managers to the public;

(3) failure to manage with proper integration, as with interest groups and/or the politicians.

We listed some factors that inhibited good team-work or created failures in team-work. They were as follows:

(1) domination by one party within the team;

(2) warring cliques or sub-groups;

(3) unequal participation;

(4) differing constraints on members of the groups;

(5) differing comments from the members;

(6) procedures being too rigid;

(7) a climate of defensiveness and agression;

(8) pussy-footing around or avoiding conflicts;

(9) lack of rewards for success and blame for failure in the process;

(10) lack of time for the job at hand;

(11) lack of agency support; and

(12) failure to address the positions of all the various parties or opponents.

As an example of failure in the team-work approach to wildlife management, we zeroed in on the 1916 Migratory Bird Treaty between the United States and Canada which, among other things, set seasons for those two countries, eliminating the period between March and September. A Protocol or an amendment was proposed in 1979 between the two governments which, as I understand it, was to have been negotiated between the USFWS and CWS. It got to the point that the Protocol was ready for the signature of the Secretary of State in the United States, and then it would have been followed by ratification by the two governments at hand. Apparently, at the very last moment, it came to the attention of various state agencies that they had not been involved by the USFWS in these negotiations. The result was that it did not get signed, and to this date it has not been signed. On the Canadian side, it was apparent that CWS did not discuss it with provincial agencies nor the native people. In other words, it was too much of a unilateral approach by the two governments.

Reasons for failure

We analysed to the best of our abilities some of the reasons for the failure of that Protocol going through, and we came up with the following points:

(1) Not all of the stake-holders in the process were advised or consulted, and this ultimately created an adverse reaction.

(2) There was not the right composition of membership in the negotiating team.

(3) Albeit it was probably negotiated in good faith by those who did take part, there was a lack of information given to the parties who were not members of the negotiating team, and there was insufficient notice of the plan of implementation.

(4) There was inadequate time utilized in trying to make the changes or bring them about.

(5) There was a total failure to appreciate the reactions of the parties that would be affected by this treaty or amendment.

(6) There was failure to frame complete or adequate objectives. What were the negotiations trying to achieve?

(7) This was a point that we wanted to stress, that the initial failure of what we saw in 1979 could be a long-term failure because it could create a lack of trust for the future. We might learn from our failures and get improved communications between the parties, but there was that aura of mistrust that hung like fog over all future negotiations, and some others that might not be on the same subject matter. There was an external climate both before and after for those who were not brought into the negotiating process.

We also moved on to the subject of humane trapping. We debated at great length whether all issues involving the management of wildlife were good subject matter for a team-work approach. It seemed to be the consensus of our team that there were situations where there was no room for the team-work approach. However, I think that the general feeling was that in all instances the team-work approach should be at least started in the early stages, but if it became apparent to the team members that it was doomed to failure, then they should step aside and leave it to the courts or the politicians through legislation, hoping to bring about a just result. Governments were failing by burying their heads in the sand on certain issues, such as humane trapping.

We talked about issues that had been lost, such as the seal hunt, or had failed due to the lack of team-work. We should learn from that. If you considered that failure to utilize team-work was one of the reasons for the loss of the seal hunt, once again it was in the eye of the beholder. If we assume that it was a loss, then it points out the importance of using team-work. When we come back to the item of humane trapping, all of us interested in the promotion and the continuation of humane trapping should learn something from what happened in the seal hunt.

We talked about failures to bring opposing camps together. Sometimes crusader types would never compromise and could not be brought together, and that led us back to the point as to when we should give up as a team and turn it over to the courts or to the legislators.

One point that we wanted to bring forth was that all hunting, fishing and management issues, in our view, were usually involving minority groups. If we were talking about trapping, that was a minority group, and the same with deer-hunting, seal hunting, or fishing. If we really put our minds to it, I doubt very much if we could come up with a matter of managing or consuming one species of wildlife that did not put one in a minority interest group in one's province, community or country. To me, and to us, the failure to address that fact would continue to promote the lack of team-work, and we were suggesting that that was a failure because there should be team-work: it was a failure to recognize this as a fact of life. All wildlife managers were usually dealing with a minority matter of special interest. They should work together as teams, and not just the managers, but all those who would be affected by the regulations or management procedures they were trying to bring into place.

We also felt that there was a failure in many instances by managers of wildlife to come to grips with the fact that we were not just talking about consumption, but were discussing the matter of killing the wildlife. We could talk about predator control and use expressions such as that, but we were really talking about the killing of wildlife and we should face up to that matter. The failure to do so had been a failure of the past, and it should not continue to be a failure of the future.

In summary, we felt that it was easier to diagnose failures in the past than anticipate failures in the future, but we certainly should attempt to learn from failures and not to make the same mistakes again. There was a general consensus that some issue-solving was not conducive to team-work, and we should leave it to the politicians and the courts after we, as a team, had exhausted the due process.

Lastly, we thought that times were changing and the problems were changing, so that now wildlife managers must, from time to time, deal more with people rather than wildlife in order to improve and retain resources. So many times negotiating teams were made up of lawyers, scientists, managers, and biologists, and we often failed to have people on the team who were people-managers, and who could analyse potential problems that the negotiations were going to bring about.

Wednesday workshops

WORKSHOP 4: FAILURE ANALYSIS IN TEAM-WORK

Chairman: R. Morgan (Ontario Federation of Anglers and Hunters)
Rapporteur: G.W. Pepper (Saskatchewan Wildlife Branch)

The workshop that I was involved in included a good variety of people, both technical and social experts. We dealt with two major areas of failure. In the first one, we looked at a non-governmental organization co-operating with a governmental organization and failing to accomplish their objectives. We defined failure as failing to meet our objectives and left it at that. In this particular case study, we had a situation where a government department had requested that an NGO assist in a co-operative effort in a deer yard, cutting boughs in a tough winter. The failure resulted when no one showed up to carry out the work, and we tried to dig into the situation to determine just why this attempt at team-work had failed.

Well, what apparently happened was that the department had approached the NGO with a request to help, and the NGO had obligingly said it would, but the people who were directly involved in this kind of an activity were never really approached specifically or directly. So we felt that there was a tendency to have the volunteer group coerced into volunteering and, as a result, when it came down to the nuts-and-bolts of delivering on the program, there was very little interest in carrying it out.

In our discussions, we came to the conclusion that most successful volunteer organizations tended to focus on fairly narrow specific areas of interest where they had fun, and in this particular situation the group that was approached to provide assistance were genuinely interested in wildlife, but they were not necessarily interested in going out in the dead of winter and chain-sawing trees down all day. Now there are groups who are interested in doing that, but in this particular case those people were not approached. We found that when governments approached volunteer groups with very little pre-explanation or understanding of the volunteer group for the program, there tended to be a less successful result than if the volunteer group and the governmental group were working closely together on a joint project, with mutual objectives and interests and expectations. So we concluded, in this particular case study, that probably the largest reason for the failure was that there was no real identification of their general objectives and their expectations when they established the original communication.

Large problems

The second area of case study dealt with inter-governmental co-operative programs and attempts at team-work, and we discovered that there was quite a nice long list of these areas, and lots of perceived failures in them. We identified areas such as the lack of an agreement on management of the Porcupine caribou herd; the lack of resolution of the steel-shot issue; the various problems in fur management; various problems in predator control; and, as Joe Hickman mentioned, the Protocol to the Migratory Birds Convention. One that we did spend some time discussing was why we had not really come to grips with wetland conservation, despite the fact that a large number of people in agencies were interested and concerned about this.

We drew one major conclusion: on large, complex problems it was extremely difficult to get successful team-work. Our record really had not been that good to date on such problems. We ran a little short of time, but we did identify a few common threads, and a lot of them were fairly common to the first case study we dealt with. There was the tendency to have difficulty in getting technical data up through to the decision-makers, and meshing those technical data with the wants and needs of users' groups, the people who were actually impacted by the decision. So that when the decision-makers met to negotiate and resolve the problem, they were lacking really specific objectives; their objectives might be vague or poorly understood, or they might not exist at all. They might be just general aims and general sorts of interest areas.

We identified that because these large, complex problems took a lot of time to resolve, the actors often changed, and when there was change in actors--a change in the negotiating team--quite often one started all over again, and that might compound the chance of failure. More problems arose in communicating; the need to touch base again and establish one's position. Often people at the technical level were able to agree and worked quite well as a team, but when the social issues were brought up, at whatever level, that was where the problems arose.

In summarizing, I think Arthur Frayling said it best: "If objectives and a common purpose are lacking, then we are doomed to failure". And this, of course, led to the common knowledge that it was extremely important in these general, large problem-solving areas to have a good solid working plan. Once one had the plan, and once the program was initiated and going, people often threw out the plan, and in the follow-up, fine-tuning did not accompany the program. This was identified as our last major problem and cause for failure. In large programs, there might be a big "hoop-la" to get things started, but the interest withered away and died because the people did not continue their communication; they lost track of the objectives. And again, the key people involved might be changed.

I think, to sum up, we could say that in major planning areas, in terms of putting together major programs dealing with almost global issues, certainly continental issues, we really have never got our act together. As John Rogers put it: "We are not going to really have a problem with agriculture in terms of draining wetlands until we identify what wetlands we don't want drained on a continental basis". We have to get our act together, and we have to set common objectives and goals, and agree on the way those common objectives and goals are to be put in place, and then carry them out.

Wednesday workshops

WORKSHOP 5: SUCCESS ANALYSIS IN TEAM-WORK

Chairman: A. Giroux (Ontario Trappers' Association)
Rapporteur: M. Singleton (Federation of Ontario Naturalists)

The workshop members found team-work success analysis rather frustrating. It was easy to rhyme off literally dozens of team-work success stories, but as we began to analyse them, the only common denominator seemed to be their total fundamental differences. Beyond what seemed to be trite, rather obvious generalities, they differed so dramatically as to be rather difficult to generalize. Nonetheless, there were several important lessons to be learned from the success stories. Looking forward, we must first recognize that the autocratic, technocratic approach to wildlife management was no longer acceptable, no matter how simple the species or issues might appear. To make sound management of harvested species acceptable, users' groups must be involved in the basic decision-making process. This was especially true in regions where a subsistence dependence existed either directly for food or indirectly economically.

Second, we must recognize that we could and must extend team-work beyond the professional wildlife manager to take in NGOs, and more particularly the public as a whole. Some of the most spectacular success stories had gone by the latter route. Direct government management of wildlife habitat on both public and private land on a large-scale basis was seen as hugely expensive and totally impractical in many cases. More than that, it was viewed with great suspicion by many "locals" who distrusted government. Extension programs, by contrast, which sold landowners on the value of their habitat or their wildlife, whether involving wetlands, Burrowing Owls, or anything else, seemed to build a huge, effective team far larger than just the professional trained crew. This salesmanship required a special set of skills very different from that learned in most biological training; and most of the dramatic success stories had involved effective people-managers.

Third, we must recognize wildlife as "sexy", and use that innate sexiness to draw better co-operation from the public as a whole. Spectacular successes had frequently utilized wildlife and protection management issues packaged in a fashion that drew general public interest and support. We briefly considered numerous examples of successful team-work at levels ranging from those that were international in scope to those in individual farmers' fields; some legal, some procedural or mechanical in nature, and many involving direct species manipulation. Some of the better examples included the Migratory Birds Convention; this Federal-Provincial Wildlife Conference (an institution in its own right that had spawned a whole host of boards and committees and concepts on which many NGOs and governmental agencies were working); the Federal-Provincial Wildlife Endangered Species framework; the non-game Conservation Authority framework; the Caribou Management Boards; the Ontario Breeding Bird Atlas project; Parks Canada's Co-operative Associations mechanism; Habitat Canada; COSEWIC; the swift fox, sea otter, wild turkey, and peregrine reintroductions; and on and on.

Something in common

Common denominators kept recurring:

(1) Every success story was based upon mobilization to achieve a clear, explicit, and realistic goal. That goal was packaged to serve the often disparate agendas of the respective team members. The most spectacular successes involved simple or single species goals, and ad hoc teams with their rather short lives. Complex issues, as the preceding speaker mentioned, were vastly more difficult to tackle and tended to produce less dramatic results, although potentially far more important in the broad scheme of things.

(2) Each success was driven by one or a few spark-plugs--movers and shakers who had contagious enthusiasm, and who never lost sight of the paramount goal or allowed it to become submerged.

(3) The team was focally organized with each member having a clear understanding of the goal, and a mandate and authority to do their job.

(4) Team members were frank; they did their utmost to work from an accurate factual base and maintained credibility throughout, even where that effort did not serve their personal agendas.

(5) The team maintained on-going dialogue and commitments on both time and dollar resources, in spite of the inevitable differences that could drive wedges between them in almost every undertaking.

(6) Team members remained conscious of protocol (which appeared ironic in the light of earlier comments), even where it seemed totally unnecessary.

(7) Team members used imagination to obtain donations and services, whether for species reintroduction, research projects, or whatever. The leverage so created not only kept costs down, but also bought invaluable good will and profit.

In summary, the workshop perceived a growing spirit of team-work exemplified by this Federal-Provincial Conference, where just a decade ago various jurisdictions in this room could barely speak civilly to one another, the workshop concluded that there was now such a spirit of team-work that the session lacked some spark. But team-work was vital. We had to work to build teams on a host of different issues. We had to work to involve those directly affected users in the decision-making process, and we had to work to involve individual landowners and individual citizens in broad teams on many issues, including many habitat-protection issues, where government simply could not take it on by itself.

Wednesday workshops

WORKSHOP 6: SUCCESS ANALYSIS IN TEAM-WORK

Chairman: K.A. Brynaert (Canadian Wildlife Federation)
Rapporteur: M. Hummel (World Wildlife Fund Canada)

Workshop 6 came to two general conclusions about success, and identified 10 ingredients for successful team-work based on a large number of examples. We had no problem identifying all kinds of examples, and some common ingredients did emerge from our discussion.

First of all, we could not think of any example of a successful solution to a wildlife problem that had been arrived at in a unilateral way. Second, we thought that success was most often defined in terms of whether or not a particular objective had been achieved. This has been said a number of times already. What this meant was that it was very important to have some consensus or agreement on the objective, otherwise someone was bound to be disappointed. We thought that there were many examples of objectives being achieved, though many people had not agreed with the objectives. Such cases could not be regarded as successful. Success should involve resolving or meeting both human interests and the needs and seemingly endless wants of human users, but it should also meet the biological needs of the wildlife resource. To meet only one and not the other was not true success. We could find examples where we thought the biological needs were met, but not human needs, and vice versa.

These were the ingredients that we identified in the examples of success:

(1) Team-work must be based on genuine mutual respect. It was very important to avoid a win/lose syndrome. The example, coming back to British Columbia and the wolf issue, was that it would have been very difficult for that province to change its mind on that issue once it had become as polarized as it had, because the provincial government or the other side of the issue would have been seen to lose. Nobody liked to be a loser, and nobody liked to be seen as having lost on an issue.

It was also very important to avoid stereotyping. That was brought up by Group No. 1. If we carried prejudices and assumptions about people into a team-work setting, we were not likely to get success.

It was important to avoid the possessiveness of the mandate, and that inevitable feeling that we had got to go back to our peers and explain to them what we had got and not what we had lost. No one liked to go back and have people say, "You did what?" or "You gave away what"?.

Also, it was important to focus initially on areas of agreement rather than disagreement, and try to forge some solutions and constructive progress around areas of agreement, then move on to areas of disagreement.

(2) It was important to involve the affected parties; that seemed to be trite and a truism, yet it often was not done. Furthermore, we thought it was important to let the affected parties define themselves as the people who had a stake, rather than assuming that we knew from the beginning who had a

stake and who the affected parties were. We should give people who had an interest an opportunity to come forward and say so.

(3) Sometimes team-work could be forced. It did not have to be a love-fest. I remember Al Stewart saying, if two people had to co-operate, and were not prepared to generate a solution and co-operate, then one of his solutions was to order them to co-operate. I think that Workshop 1 mentioned this too, that sometimes people were forced to do team-work. It was not always the best way, but it did work. The example that I gave was fund-raising where funders did not want to fund a project that was being controlled or co-ordinated by a bunch of conservationists, in the sense of like-minded people. Those people would like to see the protagonists represented on the steering committee, an unlikely bunch of people thrown together, with the key, potentially hostile, parties working as a team and not just the like-minded people, with the result that there was no team-work--and no dollars for a particular project.

(4) We should define the real differences and not invent them or imagine that they existed. Our group could see a spectrum in terms of wildlife concerns. Some of them were really "Mexican stand-offs", and it was going to be "yes" or "no". Some were quite easy to resolve and brought together different interests. Then came a whole spectrum of issues in between. Obviously, if we took a win/lose "Mexican stand-off" mentality to an issue, which in fact could be resolved through some compromise or middle position, we were starting off on the wrong foot and a team-work approach was not likely to work.

(5) It was important not to raise false expectations on the part of members of the team, because someone was going to be dissatisfied and feel that the result was not a success.

(6) We should avoid universal solutions, in the sense of homogeneous solutions that were applied over a large area or a large constituency. There should be some diversity and flexibility.

(7) We should monitor the effects of team-work and the decisions that had been made by a team. In every really successful case of team-work, our group felt that there was a subsequent effort to be vigilant and to ensure that decisions were followed up and evaluated.

(8) Team-work took time and patience. This had been brought up already; often the decision or solution would go to the one who had the most time and patience. The person with a deadline, who had really got to fashion something under a time constraint, was at a disadvantage.

(9) We discussed whether or not solutions, either through team-work or not, had to become increasingly complex because the problems were becoming increasingly complex. We did not agree on this. Some argued that we needed more simple solutions; others felt that simple solutions were naive solutions. At any rate, we agreed that successes were going to be more and more difficult to come by in the future as the demands increased and the resource supply decreased. Some of the exercises in team-work that had been successful so far, we predicted, were going to be a lot tougher in the future, particularly when the resource base seemed to be declining, or not to be as plentiful as it was now.

Finally, there was kind of a cloud of gloom over our discussion. We were all very nervous about cosmetic team-work and cosmetic successes. We analysed a number of specific cases and asked: "Was that really a success?". The general conclusion we came to was that many of our successes or gains tended to be rather short-term. Many of the losses or failures were permanent.

So we had this feeling that the long-term trends in the biological base were not very good; really that team-work solutions might only be slowing down a decline as far as the big picture was concerned. As Gordon Kerr put it: "Delaying ultimate failure". That wasdecidedly gloomy, but really I think that was a feeling shared by the group. Yes, we had examples of successes, but were they really long-term successes that were turning around a fundamental trend in terms of wildlife trends and wildlife populations?

Truly finally, we felt some frustration in that, having discussed this and exposed you to my summary, all of this was already known and quite obvious. We came back to Doug Roseborough's question: "Why aren't we all doing more of it?".

Wednesday's workshops

SUMMARY OF DISCUSSION

K.A. Brynaert (Canadian Wildlife Federation), noted that Bob Bell had said that using words like "anti-conversationist" would divide, and asked: would divide who from what?

R. Bell (Northwest Territories) replied that it was his impression that a number of people felt that the term was sufficiently vague that it could be interpreted in a number of ways, either positively or negatively, and that some of the groups that would be involved in the team would have trouble with it because of that imprecision.

K. Brynaert said he supposed that he looked at it the other way. Quite honestly, he wanted to be divided, or wanted the public to perceive the International Federation for Animal Welfare as being totally separate from the Canadian Wildlife Federation. To him, the positive aspect of that was clearly to identify those people who did not stand for conservation principles. He saw it as a positive rather than a negative thing.

N.R. Jotham (Canadian Federation of Humane Societies) saw it differently. They could certainly do that kind of thing in the public arena with their own organization, he said, but if they were after team-work, he did not know how they could achieve it within the body of one group. He gave as an example the suggestion that anybody who was opposed to hunting was necessarily an anti-conservationist. One did not have to have hunting in all cases to be a conservationist. Also, someone who was opposed to trapping was not necessarily anti-conservation, but might be opposed to that particular form of so-called co-management. He thought that by the narrow labelling of everybody who was anti-something or other as being anti-conservation, they simply just raised hackles, which might be fine out in the public forum, but if they were interested in team-work, they could not do that.

D.R. Halladay (British Columbia Fish and Wildlife Branch) referred to a comment on Ross Thompson's report for Workshop 1, which was that he appeared to be dealing with the means, or the methods, rather than a description of the needs. In his own group, they had recognized that. One of the things they had settled on was that the need was obvious, as the Chairman had suggested with the grooming example. There might be some difficulty when they got into discussing methods in the Thursday session. It would be somewhat of an overlap, but not necessarily time wasted.

J.D. Roseborough (Ontario Wildlife Branch) thought that they really needed to distill what they had said a little more, because Workshops 1 and 2 did not really address the needs. Ray Halladay had suggested that the needs were obvious, but if they were really so obvious, why did they not do more of it? Why were they even discussing team-work at this conference if the needs were so obvious?

S. Curtis (Chairman) commented that the Hon. Alan Pope, in his keynote speech, had said that wildlife management without sharing was a luxury that they could not afford. That implied, to him at least, team-work.

N.R. Jotham said that Joe Hickman's group had picked up on the humane trapping issue, and he thought it an example of both a failure and, at the moment, partial success. The failure was that it had taken, in fact, 25 years before any form of team-work approach to the issue was set up. In his view, that pointed up a very compelling reason for the need for team-work, because it was another example of what Monte Hummel had said, that the process had to be forced into team-work. He wondered, if the team-work approach had been taken even 15 or 20 years ago, whether perhaps some of the problems surrounding the killing of fur-bearing animals might not have become as entrenched as they were.

D.R. Halladay said that times were changing. With hindsight, he thought that they had to recognize that the reason why they had not been more proficient in team-work, as they had described it there, was because they had not had to, on many of the issues that were now before them. Now they could see that this was becoming the more normal framework for operation, so that team-work might be something that they should be striving for in almost every activity they pursued in the future. But it was not always so in the past. It had only been in the last half of one full decade that this had been an operational necessity, and it had only been within that time that they had discovered how they had gone from single issues requiring team-work to virtually everything they did requiring the team-work approach.

He did not think that they should blame themselves, as he sensed they were doing a little bit in some of the comments offered earlier. It was time though to discover collectively that they could work together more effectively. That was why this conference had done just that. In the last 5 years, it had perhaps produced more worthwhile output in a variety of fields than it had in the previous three decades. That might be a hard claim for him to document, but he had talked to enough people to indicate that, for the most part, they shared that impression as well. He thought that this was a very timely discussion, and it was important to capitalize on the common threads that came out of it. One of those common threads was that they needed to capitalize on some of the expertise that had been used in other fields, where the need for it had been there for some time, and learn to become experts themselves.

R.C. Goulden (Manitoba Wildlife Branch) wanted to throw in a cautionary note. He sensed that there was a bit of tendency among them all there, collectively, to equate failure with a shift in one's position. That was terribly dangerous to do, because what they were presuming was that by team-work, by working together, they were going to accomplish something more acceptable, greater, better than they would by working independently. If that was so, then team-work, to him, presupposed bringing together groups with divergent views. That presupposed automatically that there had to be some shift in position by one or both parties, and if that shift in position was equated with failure, then failure was presumed right at the outset. One of the things that they had got to watch for was, if they were going to go down the road together and achieve something noble, that somebody was going to have to give way somewhere along the line. They had to accept that at the outset and not set up failure as having to give, because in the end failure was not that at all.

Y. Dubé (Quebec Ministry of Recreation, Hunting, and Fishing) said that Workshop 3, he believed, had talked about the minority groups. It had been recently found out that it was true that people opposed to hunting and trapping were minorities. They had more people who were for it, but they should not stop there. They had

also found out recently that the number of opponents was increasing. Everybody in his department was surprised, and they had a lot of work to do to discover why there was an increase there. So when they talked about a minority, they knew for example that many more people were against trapping than therewere trappers. They had to try not to comfort themselves too much and say everything was bright ahead.

Somebody had talked about "sexy" packages to sell their products. It might be good with the majority of the population, but it might be a bad way to try to convince the real opponents. They might even lose some people who were indifferent, if they realised that this sort of selling was being tried on them.

S. Curtis thought that when dealing with subsistence issues within the context of the Northwest Territories, it was not, in fact, minority people they were talking about at all, because he suspected that subsistence hunters and trappers made up the majority in most cases.

N. Cournoyea (Northwest Territories Department of Renewable Resources and Information) said that she was fairly new to that type of a forum; fairly new to dealing with a lot of technical people, provincial ministers, and provincial representatives of the wildlife services. From time to time, it was difficult for her to understand just how far the representatives of the wildlife services were allowed to go in representing the development and harvesting of renewable resources. It seemed that in the North they were in a little different situation, but because of southern pressure, they were faced with some elements of decision-making by federal or provincial agencies, and wondered how far those agencies were willing to go to protect and promote the development of renewable resources. They seemed to have taken a lot of time and a lot of the discussion more on the retention of habitat for wildlife. So obviously, from the problems that had been put forward, it appeared that there were a great many problems if habitat was to continue as a healthy environment for the wildlife and waterfowl populations.

Often the majority users' group in the Northwest Territories felt that everyone was against them. She did not know if that was true, but they seemed to be fighting a losing battle. In the next session, she hoped, there would be some kind of direction that they could all collectively work towards. Out of the present discussions, it appeared, they would be allowed to deal with the threat to their being able to make an economical, viable industry out of the development of renewable resources. She was not a person, she said, who would like to see the stocks depleted, and she believed that conservation was the first element. At the same time, she believed that they needed each other so as to do that in the most respectful way towards the renewable resources that were available now in Canada. Yet, at the same time, she believed that they could still appear very negative to people who did not at least try to see it their way too.

In the Northwest Territories, she continued, the users' groups, the aboriginal people, were not sophisticated, and to take advantage of a group of people who did not have expertise and sophistication was like taking advantage of a child, because they did not really know how to protect themselves. If the Canadian government and the people of Canada were unwilling to support the native people, but rather made them more dependent on the government, then they would allow what was happening to continue. As she was speaking to people in the areas where the problems were coming from she wanted to stress the need for their help

in facing a critical time in the life of the Northwest Territories, because the people there depended on this for their living. That was the only thing that they had that allowed them the dignity and the cultural and traditional values to make them human beings.

The Canadian government, she said, for some reason did not act upon the issue of the "white-coat" problem many years ago. And she did not really know whether the matter of humane trapping was an issue or not. What had become very "sexy" and very profitable for a select group of people was indeed the issue, and organizations were carrying the "anti" warfare against the people who made a just living from the development of renewable resources. She did not know how they were going to get together or seek help to get over that problem, but she knew for a fact that in looking at it from the Northwest Territories, it did not make a heck of a lot of sense.

She said that she did not see from the people who represented the provincial wildlife services or renewable resources a really agressive program showing what they were going to do about that. She did not know anybody in the groups such as Greenpeace or the Animal Welfare Fund, or any of those people. They had never gone up North. Maybe they were scared to see the real thing.

The message she wanted to give the conference was that they really did need help. She hoped that in the next session there would be some resolutions or objectives that they could all share together and get over this problem, because without this, all they were doing was building up, not a working team, but warfare against each other and everybody who felt that they were not being represented. Obviously, right now in Canada and in Europe, the aboriginal people, the subsistence users, and the people who really required for their well-being the use of wildlife, were not being represented. She hoped those present perhaps could help them to do that.

S. Curtis thanked the speaker for her very moving position statement. They had heard underscored something in particular, he continued, and that was that team-work was just a process or a mechanism for getting things done; what mattered were the issues and how they dealt with them. Some issues required a great amount of productive team-work, others could be handled within individual organizations, and others could be handled in a variety of ways. But, as a group, they had to focus on major national issues of the sort that they had just been hearing about, and decide what was a reasonable approach for dealing with them. If they did not try to focus on that sort of level for the next discussion, he did not honestly see that they were going to get a great deal further than they had in the present session.

He thought that they had had some very useful discussions, particularly in the analysis of their successes, which was always more fun. He would like to get some specific indication from anyone in the room as to where they should be carrying this topic on the following day. They definitely needed team-work and more interactive management of wildlife in Canada, and to take better account of the total views of society in making wildlife decisions. If that required forced team-work on occasion, then so be it. There was an expression that necessity was the mother of invention, and if that meant that teams were formed in order to satisfy needs, then that was the way they should be formed. It was very difficult to deal with a topic as broad as team-work in an intelligent way without trying to focus on something that they could identify as an area requiring

team-work, and then work on it from that point. One could have team-work even within an organization, after all. They did not even have to have two different groups. They could simply take the decision that they were going to put three staff members on the same project, rather than have each going their own independent way, and that was team-work as well.

D.R. Halladay said it seemed to him that they had benefited from the discussions. They had at least shared some knowledge that was not always in common. They had exchanged it so that everybody was richer in understanding the various aspects of the importance of team-work. But they were a conference, a group of people who had come together for the purpose of looking at things that could be acted upon in common to the benefit of the group. It might be their focus then for the next session to look at what actions they would recommend, as a result of having reviewed this subject, to further their use of the knowledge, or to gather more knowledge, to become more effective collectively. Madam Minister had pointed out one particular issue that certainly concerned the Northwest Territories. He added that it concerned the other parts of Canada as well, and the other people of Canada. They should build on that and make that their focus.

S. Curtis replied that that was a good suggestion. To some extent they had been concentrating a lot of their discussion on team-work among players within that room, but implying many other people as well. They had not dealt in any real way with the kinds of team-work that Chuck Dauphiné had alluded to in his presentation, about forestry and wildlife for example. There were needs there for team-work with people in an entirely different industry and with an entirely different point of view, and they could make some real progress there in an area where they had not yet made a great deal. That was an area of team-work as well that they had not looked at.

He concluded by thanking everyone for participating, and wished them good luck in the next stage.

Thursday workshops

Introduction to reports

J. Douglas Roseborough, Director of Wildlife, Ontario Ministry of Natural Resources, introduced the rapporteurs for the Thursday workshops and also led the discussion period.

(The reports of the six rapporteurs and a summary of the discussion follow.)

WORKSHOP 1: FORMULA FOR TEAM-WORK

Chairperson: L. Whistance-Smith (Ontario Wildlife Branch)
Rapporteur: J. Inder (Canadian Wildlife Service)

We started out by rambling around a bit, but finally settled down to a few main items that we wanted to cover, the first one being the selection of team members. We decided that individuals or organizations should be selected according to their interests, ability, and resources. We then listed a couple of desirable qualities for an organization:

(1) a commitment to the goal or goals of the project that they were concerned with;

(2) the organization must have the resources that could be assigned to the project. There we were thinking of all resources--financial, human, technical, and political.

We also listed some desirable qualities for the individual team members:

(1) a personal commitment to the goals;

(2) a respect for other views by other members of the team;

(3) a positive attitude and enthusiasm;

(4) a willingness to compromise;

(5) some special ability related to the task at hand;

(6) certain communicative skills (one of the more important ones being the ability to listen well; we could also use individuals who were open and frank);

(7) innovative;

(8) assertive. (In our original outline we had "assertive, but not aggressive", but we crossed that out because it was difficult sometimes to be one without being the other).

We went on to list what we considered the team's functions.

(1) Establish a clear definition of the goal or goals to be achieved.

(2) Establish priorities and options.

(3) Set a time-frame.

(4) Establish procedures and assign responsibilities.

(5) Review and evaluate whether it had reached completion; and if it had not, why not.

(6) Consider the next option, or procedure, if necessary.

(7) There must be continual communication among the members and to the member organizations.

We wrestled a little with the unknown, and while most of us could not really pinpoint it, we felt that in any successful team there was something present that seemed to make things run a little smoother than they did at other times. Sometimes this mysterious atmosphere could come about by having the group's efforts recognized, during and after the process, by the parent organization. In the final analysis, the project was not completed until there was that recognition.

Thursday workshops

WORKSHOP 2: OPPORTUNITIES FOR THE FUTURE

Chairman: D.R. Halladay (British Columbia Fish and Wildlife Branch)
Rapporteur: R.C. Goulden (Manitoba Wildlife Branch)

The first subject area I am going to touch on is issues that provide opportunities for future team-work. We thought that there were about nine that we could identify right off the top of our heads. We probably could have listed quite a few more, but these seemed to represent at least a spread that we could look at.

The one that came uppermost in our minds, as perhaps the best opportunity for future team-work over the next half decade or so, was continental waterfowl management; i.e. the development of a continental strategy for maintaining, enhancing, and developing our waterfowl resources. We thought the scope here was international; it added to the "north-south dialogue". It would involve conservation organizations, industrialists, governments, landowners, and so on. We were only limited by our own imagination, we considered, in terms of developing that strategy and using team-work methods in getting to the problem, because quite clearly there would be no other way to resolve it than through team-work.

Another slightly different one was polar-bear research and management. We saw this as a very high-profile endeavour, circum-polar, and involving five or so different countries. It was international. It had all the glamour and all of the potentialities of being a very important and very significant issue both to this country and several other world powers.

There was another area, if we got down into the more settled portions of our country, and it was purely and solely a Canadian issue. It involved the whole issue of game parks, zoos, biological parks, game ranches, and wildlife in captivity. This, we believed, had the potentiality of being an explosive issue, and one which we thought could be dealt with most effectively through team-work methods. It was one where public consultation was absolutely vital. We did not think that it would be resolved without that. The public was directly involved from the entrepreneurial standpoint, as well as from a sensitivity aspect.

Another one that had a slightly different angle to it was the area of pesticide management. One example was the fact that we in North America had banned DDT, but managed to ship all of our unused stocks to South America. Therefore, we had exported the problem down there. However, we were getting back the "benefits" of that export from birds that had gone down and fed upon crops and insects that had had DDT sprayed on them. We wondered if perhaps we had dealt with that one more effectively through team-work efforts, we would not have the problem in the same way as today. We would like to think that we could have prevented such follies in the future through better team-work.

Several examples

Moving on to other subjects such as the Porcupine caribou management, which involved the Yukon, Northwest Territories, and Alaska, there was a lot of potential there for international team-work.

One issue that we thought was going to become very significant in the near future was water management, the transfer of water between jurisdictions. We saw that as a sleeping giant of enormous potential, because with the transfer of water, of course, there was the transfer of biota, and so forth.

We believed that there would have to be continued and, in fact, enhanced team-work to deal with the problem of perpetuation of the entire fur industry, not only in this country, but abroad. The whole issue of humane trap research and development, and the improvement of the image of the Canadian Fur Industry, was one that would have to be dealt with in that way.

On the subject of native use of wildlife, we believed that there was a perception gap that could be dealt with through team-work. There was a lack of understanding between southern societies with respect to the cultural, spiritual, and social significance of wildlife to people of the North and, turnabout, there was perhaps a lack of understanding by native northerners of the southern or European concerns over humaneness. This, of course, pointed up the difference in our respective value systems.

We thought that there were, in fact, some opportunities for neighbourhood team-work. Manitoba and Ontario, for example, were both developing parks on our mutual boundary, and the staffs of our respective Parks Branches had not apparently seen fit to talk to each other very much about that. Consequently, those parks might well be going ahead with quite different perspectives and imperatives respecting their use. So there was an opportunity that should not be missed. Those were some examples, and what we really thought would be useful would be to look at, not specific examples alone, but areas in the future that were going to give rise to issues that could be dealt with only through team-work.

We thought that the whole area of the loss of world forests, particularly in Latin America and in the Third World nations, was going to give rise to certain kinds of problems that almost defied description, and were going to bring pressure to bear on Western society. That would have to be dealt with through various forms of team-work. Also, climatic control was almost within our grasp at the moment, and the potentialities for disaster were significant.

We saw hi-tech communications as giving rise to the opportunity for team-work with people in very widespread areas of the world, but still on the same team. So it was not to be assumed that the team must be in eye-contact, in the conventional sense of the word, at all times.

Chemicals in the environment were likely to shape our environment in ways we did not now understand. The acid rain thing was just the tip of the iceberg. We thought that chemicals in the environment were going to provide us with some opportunities to really stretch ourselves in international team-work. Genetic engineering was another area that held potential, and also some frightening possibilities. The cost of energy and the whole energy sphere were another potential issue. These were areas that were going to give rise to opportunities for team-work.

Forums and processes

We could not leave the subject there without actually digressing a little into the area of formula, though we did not call it that. We talked about forums or processes for involving ourselves in this team-work. One of the things we suggested was that first of all we should make maximum use of those forums that existed today. The Federal-Provincial Wildlife Conference was one, and from time to time we had shaped the way in which this conference went, and we should be flexible enough to continue to do that. There were other examples. The Flyway Management System was one.

On the other hand, there was a corollary which we should be prepared to put forward: if some forum was not serving us well, let us get rid of it and develop new vehicles, new initiatives for team-work. One model that had been suggested was the Northern Science Network under UNESCO, which would bear some looking into.

Perhaps we should consider something like the Harvard Business School concept for addressing wildlife issues. Maybe this required a centre of excellence for futuristic thinkers on wildlife issues. Perhaps a "Club of Rome" type of conference or review on global wildlife issues was overdue. Perhaps we required new types of think-tanks in order to develop ideas for coping with futuristic, emerging issues, because we had never confronted some of those things before. We believed that we must have a fluid approach to problem-resolution. We could not be as traditionalistic in our thinking, although there was nothing wrong with tradition. We had got to be willing to be flexible, to involve new kinds of people and new kinds of thought processes.

On the capacity for instant communications, an example was the recent British Columbia wolf control program, which was conceived to be pretty much a local issue. But, within days, as a result of accident and other things, it had become a global issue. Our capacity to communicate may well override the importance of our technological know-how. We thought that our coming from technological backgrounds was important, but there might come a time when our ability to communicate, to get along with the people with whom we shared that technology, might become even more important.

Wildlife was no longer a local issue. As I believe Mr. Pope mentioned in his keynote address, no other area of public policy elicited more controversy in his ministry than did wildlife policy. That was also our experience. We must select, as it were, issues for resolution by higher forms, while being willing to make the decisions on those that were best resolved locally. We believed that not everything could go to committee; not everything could be a shared responsibility and a shared decision. We must make certain decisions so that local people could get on with local issues. Of course, we must have good judgement in deciding which of those two camps a decision went into. We must have the courage to make those decisions, and a lot of luck along with it. We must face up to problems: they were resolved easier if they were tackled early. Often, in problem resolution, a number of opportunities came up that otherwise would never have arisen.

Public participation

We needed to involve the public, we believed in, team-work. We must recognize that this was time-consuming, and there were the problems of raised expectations.

There was extra staff time and effort required, and some significant regional differences across the country which, if not taken into consideration, could cause us to stumble. The potential for misinformation grew, we believed, in proportion to the number of parties involved and the availability of the means of communication. Participants in team-work had a responsibility to ensure proper, accurate, and immediate information for the others who were affected in the process. The need for participants to "look good" during the course of decision-making must be balanced against the ethics of public communication.

Present decision-making systems in government did not always work well, and some of us in government were not as quick about changing our methodology and decision-making as we should be. Generally speaking, in government, decisions tended to come from the bottom up. We sent up decisions to the top level where they were finalized, and sometimes there had been cases where dialogue between departments at the uppermost levels was not all what it should have been, and consequently the decision, once rendered, was one that caught another department by surprise.

We seemed to have no particularly good mechanisms to handle the individual who did not represent any particular interest group, but who could be immensely influential because of the present availability of the media. If that person was articulate and could get to the media in the right way, it could essentially cause a complete halt to the efforts of many well-meaning groups, agencies, and people. That was something that we had not reckoned with. No one seemed to have a good handle on how to deal with that. There were some people in society who did not want to be team-players, were not interested in consultation, but were highly motivated and could, with current technology at their fingertips, bring to themselves tremendous power. This was both good and bad.

There was an intrinsic value of wildlife, and this was expressed in the "Guidelines for wildlife policy in Canada". This fact was somewhat sobering to some people, because it might well provide a basis for a discussion or debate on animal rights. There might be a need in the future for a national dialogue on that question. We had to watch out and ensure that our philosophical basis for management embodied the cultural, technological, and applied aspects. We should be consistent in how we treated those three. The opportunity to use modern communications technology was a sword that cut both ways. We had more information and could transmit it faster and farther today than ever before, and this presented us with both an opportunity for good and for misuse.

We perceived levels of team-work between, for example, non-governmental organizations, between governments at the local, provincial, and national levels, and between disciplines--wildlife, agriculture, forestry, fisheries, and water management. These combinations and permutations were literally mind-boggling. Therefore, if we were going to handle them well, we were going to have to define the processes for handling them. People had done this. There were experts in this arena. After leaving this conference, we should want to get ourselves into some of that literature and find out those processes, because if we did not know them, we were not going to use them, and if we did not use them, we were going to leave ourselves in the dust.

Summing up

In summary, there were opportunities for future team-work in wildlife management. These would require a consistency in our approach to the continuum from philosophy,

to culture, to application. Each group had a responsibility, in our opinion, to explain and to justify where they fitted into that continuum, and why they had selected their position on it. In team-work the opportunity existed to make our case or challenge other people, but we must use that opportunity responsibly. We could respond in two ways--proactively or reactively. Agencies must be prepared, in our opinion, with factual information, and be ready and willing to distribute that information. We must be prepared to discuss local issues on a global level. We had often not been prepared that way. Some felt that if they had a local issue, they would not discuss it on a global level. We believed that we might not have that choice in the future; that this whole exercise that we went through led rather naturally into consideration of the whole sphere of communication as the subject of next year's conference.

How agencies, including NGOs, were organized was less important, in our opinion, than their attitude and their willingness to communicate and work as a team. In other words, we looked a little at organizational structures and believed that there were probably some structures that did not encourage communication and team-work. We believed that that was not the fundamental problem, not a structural problem, but an attitudinal one.

Thursday workshops

WORKSHOP 3: FORMULA FOR TEAM-WORK

Chairman: T.C. Dauphiné (Canadian Wildlife Service)
Rapporteur: J.A. Keith (Canadian Wildlife Service)

Inevitably, what I am going to report for Workshop 3 is going to overlap with what Jim Inder has done. I hope that, after this conference, somebody can take the time to pull the various pieces of paper together from these two days of discussion and produce, perhaps, a little booklet, "Guidelines for team-work", which we can all then use. Otherwise, these pieces of paper just disappear as soon as one leaves the conference.

We talked about two topics in our workshop, and they interwove with each other during the day. The first was general guidelines for effective team-work between federal, provincial, territorial, and NGO representatives to address wildlife management issues. That was exactly what we were assigned to do. In addition, we found ourselves talking about a specific project, stimulated to it by Nellie Cournoyea's very moving speech in the previous session. That project was to deal with the growing opposition to the taking of wildlife.

In our view, the first of the guidelines for team-work was to study the issue very carefully--what issue the team was supposed to deal with--and try, if possible, to be anticipatory, instead of always waiting for an issue to blow up in our face and then be defensive. Second, decide whether or not a team approach made sense. We have had several good examples on both days of cases where a team approach would not work. Next, establish precisely what the goals of the team-work really were. Again, to echo Jim Inder, select the team members very carefully, but particularly in terms of the interests that we wanted to be represented on the team. For instance, there was a profound difference between a team formed to defend or promote one position, or one side of an issue, and a team that would try to find an accommodation over the issue. In the latter case, you wanted to have as many sides of the issue as possible represented on the team. In the first case, you only wanted a certain sect, as it were, to fight the other team. A clear sense of which of those we were establishing was important.

Our group thought that we should try to select as team members people who were skilled at team-playing and human relations. If we did not have them in our agency, consider training them as specialists in conflict resolution. Then establish at the outset of the team meetings that compromise was necessary. Unyielding defence of a mandate or position would defeat the team's work. So, to come back to Pat Bidol's point, try to make it a ground rule of the team that we would be bargaining on the basis of interest, not on the basis of mandate. The more team members knew and understood each other, the better they would work on teams. So, among the habitual team-players in wildlife management--the federal, provincial, territorial, and NGO agencies--deliberate effort should be made to foster an understanding of each other. A very good way of doing that was to temporarily assign people from one agency to another. We have seen quite a bit of this recently.

Team performance could be enhanced, we thought, by ensuring that due credit was given by a team member's home organization to her or his work on the team.

Agencies must assign adequate staff time and travel funds to permit teams to do their job. Finally, the resolution of wildlife management issues normally did not end with the completion of an inter-agency team's work. The product of the team-work must be sold to the public, because almost all wildlife management issues of the sort that we dealt with ended up in the political arena, or the court, where the team's work was judged.

Growing opposition

Now, as I go through our special project, I think you will recognize that we were giving illustrations of the guidelines that I have just been mentioning. The project was on dealing with the growing opposition to the taking of wildlife. This was an issue that the Federal-Provincial Wildlife Conference should tackle. It had tackled one aspect of it, namely humane trapping, but the underlying issue was very much broader. It was the taking of wildlife by any means at all. This broader issue needed to be carefully analysed, and the means of dealing with it carefully considered.

We agreed that a team approach was needed in this case, and perhaps at two levels. First, co-ordinate the federal-provincial-NGO effort to maintain the taking of wildlife as a normal part of conservation. That was forming our team on one side of the issue as it were.

Second, on a different level, an attempt should be made to form a team that drew the proponents and the opponents of wildlife-taking into a single team to achieve some acceptable middle-ground. The interests to be represented on the team or teams needed to be thought out very carefully. For example, should the interests only be from the wildlife sector, or should they include fishermen and farmers of livestock or poultry? This broader group would be beneficial to wildlifers, because it would force the public to recognize that their daily food depended on killing animals. Killing animals was a normal business. It was like having breakfast or lunch. But, of course, this might be resisted by fishermen and farmers who wanted no part of being dragged into an ugly controversy over killing seals or trapping lovely mink. So again, deciding who was on the team, what interests should be represented, had to be thought out very carefully in terms of results. As a general point, widening the team to include more and more diverse interests, as I have just described, increased the risk of an internal failure of the group, but it might be essential in order to find an imaginative solution to the external issue that the team was formed to deal with.

Changing public perceptions on the issue of wildlife-taking was clearly a primary goal of this particular project, rather than simply finding a common ground between agencies or factions. Therefore, particular attention had to be given to delivering public educational programs and, for this, team-work would be really useful. It was suggested earlier that public-service TV clips, of the sort used by CWS and Parks Canada, could be designed specifically for this purpose, but twinned with provincial material that would be put into the curriculum of every school.

Thursday workshops

WORKSHOP 4: OPPORTUNITIES FOR THE FUTURE

Chairman: L. Males (Ontario Federation of Anglers and Hunters)
Rapporteur: J. Bain (Ducks Unlimited Canada)

Our workshop took a little different turn from Workshop 2. We generally agreed that team-work was the route to go, and was the only way in which we were probably going to survive and solve some of these problems that could not be handled in some of the more traditional forums that had been available to us. We did have some difficulty with the basic definition of team-work--what the team would look like, how it should be formed and selected, and so on. So what we tried to do was take a current example, looking not just to the future but back a little bit; seeing what happened, and trying to bring that into perspective, and then possibly to apply that to the future.

The example was one that had been discussed earlier in the conference. As a result of Canada being caught unprepared over the "white-coat" issue, it was obvious that more vigilance was necessary. A proactive, more than a reactive, approach to team-work must be instigated. The "anti" movements that had caused us some grief over the years were well organized, and therefore it would appear that, noting some of their successes, we should become more organized in our professional wildlife management approach. This approach was being demonstrated by the Fur Institute of Canada, comprised of over 50 team members, I understand, and many NGOs and, of course, the 13 governmental agencies. We hoped the model developed by the Institute would have applications to other issues necessitating team-work. Some of these issues had been made well-know to us in the form of a "hit list", which could be a little bit frightening. Again it was the wildlife issues that we were looking at: the future of fur ranching, sports hunting, and sports fishing, and things like predator control; issues that wildlife managers dealt with almost on a day-to-day basis were now becoming major issues.

Two directions

Within the team-work structure, we perceived two main directions that would be very important to keep in mind for the future. Of course, one was the on-going research, but we could also see that what the future really held was for us to look much further into public relations. An example of research was the one commonly discussed over the years in this conference, again going back to the Fur Institute, and that was the trap design research. The other area of research which we thought was extremely important to the future was socio-economic and marketing research; something that had often been discussed but usually never really accomplished. Progress had been made in design research using materials from the space age. Although our people had kept up in that area, it was felt that there had been sadly little done in the area of socio-economic and marketing research.

Historically, we thought, most agencies had dealt with issues effectively at the local public-relations level, and now we must recognize that there were opportunities in the future to work on a national and global basis. We felt that the future issues were no longer just in our local community; we had always been

able to deal with those. Some of the issues were being fought and discussed on a global basis, and it was the fur business that really brought this out. What had really happened over in Europe? Many of us were not aware of the campaign that was taking place. The fur was based and taken in Canada by Canadians; however, the arena that the battle was fought in was over in Europe. With regard to that and the whole area of communications, it was felt that NGOs should be encouraged to expand their membership, and thus aid in communications--not only those within Canada, but those operating on a world basis.

Need for experts

Team members must be identified and organized under an umbrella organization. Again, the example that was cited in our meeting was the Fur Institute. In the past, teams had been made up of the traditional groups, such as non-governmental and governmental agencies. Future opportunities dictated the involvement of experts in the communications, socio-economic, and marketing fields. We have had one of those experts at our meeting, and I think that it was agreed that her comments as a motivator were excellent. We were not necessarily saying that there had to be a motivator, but we were talking about experts in communications. I commented before on the fact that we had made advances in some areas of research, but we had not made the advances and then taken advantage of some of those new disciplines in communications.

The team must be composed of believable sources. We felt that it was very important in these issues that we were going to be facing that we should have credibility. Sometimes the sources had not been considered credible, therefore creating the problem of the presentation being made, but not really being believed.

Ideally, the team should be made up of all interest-based organizations, all sides being represented. However, we did recognize that, practically, this just might not be possible. We were still going to end up with one team versus another team. We struggled with that issue in our workshop; it was a fact of life that we were faced with in the team approach. We had to keep in mind that someone else had another team and could well be in opposition to us. The trapping issue was current and high profile, and it was an opportunity to demonstrate team-work. Special efforts should be made to ensure its success.

Thursday workshops

WORKSHOP 5: FORMULA FOR TEAM-WORK

Chairman: A. Giroux (Ontario Trappers' Association)
Rapporteur: J. Bailey (Northwest Territories Department of Renewable Resources)

The members of Workshop 5 agreed at the outset of our session that the "formula for team-work" topic was well covered in Wednesday's discussions. I thought that we would have some new points to bring out, but many of them had been mentioned already by other groups, so much of what I say here will be repetition.

We agreed that any formula for team-work must be flexible, in order to be adaptable to the wide variety of situations in which team-work would be used. Also, the formula could be broken into the two primary areas. One that you have heard quite a bit about was the team's composition. We also dealt for some time with the process of team-work and how it should operate.

With respect to composition, the team should include all important interest groups. We recognized that there could be great difficulties regarding where to draw the line when inviting groups or individuals to participate in our team-work effort. Our invitations might be given priority according to the effects of the team's endeavours on them, but it was rarely practical to invite all interested parties to participate. We must also keep in mind that the team should be aware of, and prepare for, the possible reactions of excluded parties.

All team members should be familiar with the objectives of the team, and pertinent background information about the issue they were setting out to deal with. By having all members properly prepared, the team had a greater chance of being effective. When possible, the team should include individuals with a variety of backgrounds, to broaden its scope and collective expertise. As has been mentioned several times, it was essential that the team should have strong leadership. The team leader should be established prior to, or early in the process, to give the team consistent direction and avoid possible struggles to become an implied leader. Often when we did not establish a leader, there might be individuals who tried to be the leader by implication, and this was often counter-productive.

The leader should be a good motivator, and quickly identify other team members who could assist him or her in motivating the entire group. In certain cases, particularly when a team was dealing with a controversial issue, it might be helpful to have a third-party leader; an arbritrator of sorts. In that way, he/she would be able to help the team stay on track and be productive.

Motivation of team members was often a function of their commitment to the issue and, when possible, the team should be composed of people with genuine concern for the subject. If they had that commitment, they were going to work harder at trying to solve the issue or deal with whatever problem they happened to be working on. As a final point, as far as composition was concerned, the size of the team should not be unnecessarily large. We all agreed that smaller groups tended to be more productive and efficient. We should also bear in mind the points covered before regarding participants' selection. We did not want to leave out important players just for the sake of keeping a small group that could get our work done quicker.

Goals and objectives

Regarding process, our group had agreed that the first step in the team-work process should be establishment of goals and objectives. This again has been talked about at both workshop sessions. It was essential that all members be aware of these so that the work of the team did not go off on various tangents, stayed on the topic, and achieved the results they had intended. Following this, all members of the team should have a clear understanding of the issue they were dealing with, along with the goals and objectives. Similarly, the general objectives and attitudes of individual members should be expressed at the outset, so that members would know the general stance of the other participants in the team. I have used the term "general" twice to emphasize the importance of not going into a team with non-negotiable positions or objectives. I think that we have all recognized at these sessions that if this was done, the process of team-work would not even begin. However, relating general attitudes about our general position could often prevent people from stereotyping members of the team who, based on past performance, might be assumed to have a certain position on the issue.

The team should have a well-defined mandate. In most cases, this was worked out before the team was even formed, but often it was necessary for this to be established by the team. If this was the case, it should be developed at the outset. A definite plan of action should be developed at the outset. This plan should address the time-frame the team would work within, the fiscal and human resources available, and the mechanism available for assessing the team's progress. Shorter time-frames were considered by our group to be the most productive. It was also important that the leader closely follow an established schedule of progress. Where the members had significant differences, the team should concentrate its initial efforts on areas of agreement, and work into the more controversial areas later. By doing this, a spirit of co-operation rather than confrontation could be fostered in the early going, and might possibly benefit negotiations and discussion on the more controversial topics later on.

The group also identified instances where team-work applied in a less structured form. An example of this was within a government department that had a number of sections that could conflict. Wildlife management, timber management, and mining: if we had those three disciplines within one department, we could have a form of team-work within that department that was not structured, as in a committee or task force. Team-work in these and other similar situations should occur on a day-to-day basis and, though not structured, adhere to the basic principles of honesty and factual discussion.

Finally, a point was brought up which, while not relating directly to the subject of a formula for team-work, we felt was important to the concept of team-work in our current environment. The involvement of the public in management programs and decisions could take three forms. The first occurred where managers simply told the public what they were doing. Second, some input might be solicited from members of the public. Third, the public was directly involved in decision-making. In the past, government agencies had used the first method almost exclusively and, while it was not always possible, they were now seeing the necessity and value of the increased use of the second and, more particularly, the third.

Thursday workshops

WORKSHOP 6: OPPORTUNITIES FOR THE FUTURE

Chairman: K.A. Brynaert (Canadian Wildlife Federation)
Rapporteur: M. Hummel (World Wildlife Fund Canada)

Workshop 6 identified a number of future opportunities for co-operation or team-work, at all stages of wildlife management and with specific examples.

Co-operative planning in setting objectives

We thought that the proposal that provincial and territorial conservation strategies be drafted, or that there be team-work in terms of comprehensive planning of some kind, was very important. A lot of people said that if we did not share the goals, then we were not going to share in the successes. Examples are the "Strategic land-use planning process" in Ontario; and underway or proposed, a framework for a conservation strategy in British Columbia. An example of where maybe this had not worked was wood bison reintroduction in the Northwest Territories, where there was involvement, but only after the basic framework and objectives had been set.

Co-operative research

We identified a problem that no one else had mentioned yet, and that was bridging the gap between academic researchers and managers. We thought an example of trying to do this was the Ontario Renewable Resource Research Grant Fund. Its idea was to help academics understand what kind of information was need by managers, and vice versa; to help managers understand the degree of accuracy and competence of information that they were going to have in making sound decisions. Also it was important that the research stage in terms of team-work involved not only academics or researchers and managers, but the users. Wherever possible, we agreed, it was best to get the users into the field, actually doing hands-on work--marking, tagging, observing, surveying--to see how the work was being done, so that they could agree or disagree with the results by virtue of practical involvement, rather than just having it announced that a certain body thought that there was a certain number of animals out there. Examples were the World Wildlife Fund's "Whales beneath the ice program", and the Ontario government's co-operation with the Northern Ontario Trappers' Association in some moose surveys, when there were sceptics there; and also examples from fisheries in New Brunswick.

Co-operative management and decision-making

This has been mentioned a number of times, where users were actually involved in management. It was again discretionary in terms of how far we would go and why. We thought that it was very important that if users were going to be involved in management, there had to be an underlying value or ethic, understanding, and appreciation of a conservation point of view. Some people called it stewardship. Otherwise we were letting the foxes look after the hens. My international

experience indicates that a lot of people ask us in Canada about this. They ask: "Why are you against having the whaling industry preside over the setting of whaling quotas, but you seem to be in favour of allowing other users, whether they are sports hunters or subsistence hunters, to have a role in management of other resources in Canada?".

It was mentioned that probably it was not necessary, or important, to change roles or radically restructure our legislative system to involve users in management, but rather to broaden the team that now existed. Examples are the Caribou Management Board, the use of Hunters' and Trappers' Associations (HTAs) in the Northwest Territories, and perhaps moose management in FinnoScandia, all the time recognizing that someone was going to have to make a decision and take responsibility for it. It was fine to be involved in making decisions, but sometimes not so fine to be responsible for them.

Co-operative monitoring and evaluation of management success

Again, there should be team-work in reviewing plans periodically, and also in field evaluation of whether our great management plan was really having the effects that we had predicted it would.

Co-operation in open and shared information

This was something that was seen as a future-orientated concern, as well as a current one. I was reminded of Mr. Pope's remark that wildlife policy tended to be a controversial matter. Everybody seemed to have a big, fat opinion about what should happen. We also noted that, while some groups were promoting the right to hunt, other groups were promoting rights for the hunted, which had the potential for a head-on collision.

Traditionally, when a sensitive matter arose, the response of government had been to be very secretive and careful that information did not become available, because the issue was controversial. A more enlightened view would be one of openness, saying, "Well, this is going to be a controversial issue. It's only going to be more controversial if we are secretive about it. Let's throw it open and have an open debate". We felt that if it was thought that wildlife policy was controversial now, "we ain't seen nothing yet". It was going to be a real pressure-cooker in the future, and the only way to resolve these issues was going to be through openness and sharing information, and getting our best arguments publicly out on the table, so that if someone had got better information or a more persuasive point of view, they were given an opportunity to offer it, and we could rebut it publicly. In the end, we thought, these problems would only be solved through team-work if we had faith in people. We saw that as an opportunity rather than a problem.

Opportunity for co-operative funding

We have often suggested that we should pool resources and work together. There are many examples of using NGOs, particularly to tap the private sector. I must candidly say that I have never found a governmental agency that was able, or had any experience really, in tapping money from the private sector. There is a golden opportunity to do that through NGOs. We have had examples of the Canadian

Wildlife Federation seconding staff for Habitat Canada and other undertakings. I understand that the Ontario Federation of Anglers and Hunters is contributing some money to some moose-habitat work and reintroduction of wild turkeys. World Wildlife Fund has been working, at considerable expense, to support endangered species work in Canada. So there can be co-operative funding arrangements as well.

One observation was that we thought it was too bad there were so many well-meaning people interested in conservation and in wildlife, but who were not employed or able to get involved, if not on a career basis, even voluntarily in this area. We did not have a solution for this, but we felt that it reflected a tremendous waste of potential talent and energy in Canada. Conservation really was a very popular area, and we had not done a very good job of mustering this interest. In this regard, there should be some co-operative arrangements on job creation through NGOs or between governmental agencies.

Specific areas

Here is just a very quick list of specific areas where we thought team-work in the future was necessary and quite possible. Habitat Canada, by virtue of its make-up and its mandate, had an interesting idea perhaps about leasing land for wildlife purposes, meshing them with forest management agreements in the provinces.

On the issue of native concerns that had been brought forward by the Northwest Territories, not only was there an opportunity within the NWT through HTAs and HTA federations to involve users and have co-operative management and team-work, but also there was great potential for support from the South, and even outside Canada, from other conservation organizations, whether they were governmental or non-governmental.

What about the question of native participation in COSEWIC? This was also raised as an opportunity for team-work. The "Canada waterfowl management plan" was mentioned as an example for team-work. In Wildlife Week and Project WILD, if you looked at the proposals, they definitely involved team-work.

We had a split discussion about the possibility of dialogue with animal welfare groups. Some of us felt that it was worth doing, and possible; others felt that lines had been drawn, so that there was some doubt as to whether either side was prepared to come to the table. I have betrayed my views, but in fairness, the group was split on that.

Species reintroduction programs were very popular in terms of public perception. People did not seem to like the word "sexy" here, but I think that we should admit that some things do have a certain media appeal, and species reintroduction programs are one of them. So there is a good opportunity for team-work there.

And, finally, here is an idea that I was surprised to see not mentioned earlier. Our group felt that it was time for a new "Who's who" series. Something that was tasteful and not "sexy" in the sense of media-hype, but still effective, with a management message--a message that could and would be endorsed by a range of governmental and non-governmental organizations.

SUMMARY OF DISCUSSION

G. Sheehy (Canadian Nature Federation) thought the reports were really excellent. He knew that they would come out in some form in the proceedings, but agreed with Tony Keith's suggestion that they all be brought together. Therefore, he would be willing to edit or participate in a team that edited these reports.

J. Roseborough (Ontario Wildlife Branch) thought that, after this discussion, they would certainly be interested in forming a group that would take a look at all the material that had been prepared, and see if they could put it together into a publication that would be of use to all of them.

G.R. Kerr (Canadian Wildlife Service) remarked that he was rather intrigued by most of the reports suggesting that they might have a team-meeting with their opponents. To his mind, that was a good idea if it could work. He would like to hear some discussion as to why people thought it might not work; they should at least give it a shot.

J. Bain (Ducks Unlimited Canada) said that this was where some of the definition came in as to what a team really was. The team tried to look at the objectives and so on, but they would have someone there, if they had invited everybody, who was completely opposed. Either that person would leave the team or be so disruptive that they would get very little accomplished. People in his group had had the same feeling, that everybody should be invited, but when they looked at it realistically, they could not see how it could work.

G.R. Kerr thought that they might have to give it a lot of thought. Surely, if they went there with one common base, something like the "World conservation strategy" as a place to start from, maybe at least some people might understand one another better. They might walk away deciding to disagree with each other, but at least they would know why.

K.A. Brynaert (Canadian Wildlife Federation) said that if he understood correctly, Gordon Kerr was saying that if they used those who acceded to the principles of the "World conservation strategy", they eliminated the others. Greenpeace had applied for membership in IUCN and had been denied on the basis that they did not meet the criteria. So they were out if that was the influencing factor.

M. Hummel (World Wildlife Fund Canada) asked why they were getting the team together anyway. Were they teaming up against a common enemy, as it were? Or were they getting together a team to resolve what had been, and looked like being, one big difference of opinion in the future? They had got to decide why they were getting the team together. What he saw now was a very effective mustering of teams on both sides of this issue, and they were preparing for war. He did not mind going to war, but would like to make sure war was inevitable before he did; and he was not convinced, as Ken Brynaert was, that war was inevitable. There had been some intelligent, sensitive criticism of the "World conservation strategy". He said that as representing one of the organizations that had funded and drafted it. The third objective, the sustainable utilization of wild living resources had been difficult for some people to accept, and they were not all crazy or selfish or simply trying to make money from wildlife concerns. In his

experience, there were some sensitive and intelligent people who did have sympathies with the animal welfare movement; who were quite capable of listening to a different point of view, and in fact changing their mind. It was a job that he had to do almost every day. He just did not see a lot of problems that really had been solved by the win/lose approach. They would have a winner and a loser, and they had better hope that they never had to work with the loser in the future. Furthermore, his verdict and prediction would be that the side of the issue that most people in that room represented would not win.

J.D. Roseborough pointed out that John Bain had said that one team versus another team was a fact of life and, therefore, they needed team-work to fight the team that was on the other side. Perhaps the group had not thought about the two teams teaming up to work together towards a common goal, if there was a common goal. He did not think that it was just one team against the other, but one team working for a goal, and then trying to find the goal that was involved with the other team. If there was no team, there was no team-work. It did not necessarily hold that they were always in a confrontation position, especially in government, where their ministers represented and, therefore, they themselves also represented, all of the people. They were proponents of all of the people rather than of a select group.

L. Males (Ontario Federation of Anglers and Hunters) thought that they were basically alluding to the fact that there were going to be two sides, that there was going to be a certain amount of polarization; and what they concluded was that it necessitated the professional aspect that really had not been brought into this before, i.e. a professional mediator to be able to draw some common ground out of the two groups. That was where the team aspect came in. Perhaps they had left that out of the report, but that was what they were leading up to. So the professional aspect was certainly there; there was a red side and a white side, and the mediator's job was to find the common ground.

R.C. Goulden (Manitoba Wildlife Branch) said that he had had the pleasure of participating in the Banff School of Management course last November, which dealt with integrated approaches to natural resource management. One of the principal speakers at that conference was a fellow by the name of Rich Collins, who represented one of the early movers and shakers in the field of environmental mediation in the United States. He claimed that that was the fastest-growing industry in natural resource management in the United States. There were now some six schools that specialized in it, and it had come about principally because the courts down there were literally glutted and unable to deal with the number of cases of litigation of one group taking the other one to court, principally on environmental issues and environmental impact statements. They had now found that environmental mediation, which was a unique undertaking, was in fact working. Some of the most obstinately polarized groups had, in fact, managed to come together to some extent and at least understand each other better. So he would not rule it out-of-hand as a method for working up here. It should be something for them to look at at some stage.

J. Bain said that it could happen to some extent. They understood each other better, but their objectives might not have changed. They understood why someone wanted to accomplish this, and why someone did not want to accomplish it, but it really did not mean that they had achieved their goals. The sides might have improved communications and had a little better understanding, but he still thought that if there was opposition out there, they still ended up in teams.

J.A. Keith (Canadian Wildlife Service) thought that the objective of a team to resolve a conflict on the issue of taking wildlife would not be to totally to convert one side to the other's point of view. It was not a question of persuading the Greenpeace people to love the shooting of birds or the trapping of mammals. The object of trying to bring them into a team over an issue like this would be to increase each side's understanding of the other's needs and position and interests, to the point that there would be a cessation of public hostilities. One objective in this case would be that Greenpeace would be brought to recognize the reality of subsistence living in much of rural Canada and, therefore, withhold their public attack. Now that was a much more modest objective than saying they were trying to convert Greenpeace to believing something that they clearly did not. Even that objective might be impossible to attain, but to refuse to try to attain it, and instead to lock horns in a sort of male-elk style of warfare, seemed to him to be the thing they would try last rather than first.

J. Inder (Canadian Wildlife Service) said it was interesting that they had had six groups, and they did not seem to have had nearly as many radicals in his group as the rest had. The point that he was trying to make was that they had looked at team-work as a combination of efforts, co-operation to reach a common goal. What other people were talking about was negotiation, settling disputes, and that really was communication. What they were aiming at was more communication from different ends of the spectrum. His group had looked at team-work as trying to pull together, and if some did not have a common goal, they could not really be on the team.

K.A. Brynaert did not want to leave the wrong impression. Sure he could sit at the table with Greenpeace. They had come into his office and had talked and he knew where they were coming from on some of their initiatives, and indeed his federation had supported them with money, but there was a line, and below that line the Canadian Wildlife Federation did not want to sit at a table with Greenpeace. Greenpeace did not represent conservation. He would have difficulties sitting at the table with the Animal Welfare Militia, who would kill people to save animals, so they said. He did not know whether those present were aware of the movement. He had had discussions with the RCMP as late as 2 weeks ago about this becoming a very serious thing. He saw no purpose in meeting with or sitting at the table with those people. Neal Jotham they could communicate with. He understood that without Neal they would be something less than what they were. There was a level where one could deal with people, and below that, in his view, there was absolutely nothing to be gained by it. They were not in the business. They were a fraud.

J.D. Roseborough pointed out that two or three of the workshop groups had spoken about the increased amount of communication; that local issues would become provincial issues, which would become national issues, which would become global issues. He supposed that it was a challenge to wildlife managers across Canada to know how something that happened in Timmins today would become an issue discussed in London, England, within 3 days by a variety of groups. That was something that they had to recognize and face. Three groups had mentioned that it was not only going to happen, it was happening right now. He was not too sure that they should not be sitting down at the table with whatever opposition there was.

J. Inder said that they were not talking about team-work as far as he was concerned. The word team-work could come in if they were addressing an issue and

the issue was the "antis" or whatever. He thought that where they needed team-work was for the people in that room to get together and move into the communication field, and get their point of view across, whatever it might be. Their view was extreme, too, from the other person's point of view. They should get that across to the public and the politician, who had to make the decision, so that they knew both sides of the story.

M. Hoefs (Yukon Territory Wildlife Management Branch) said that there was one group that had made reference to the fact that the majority of people were not organized and so, therefore, could not become part of a team. He thought that not more than perhaps 15 to 20% of Yukoners, in the age group they were talking about, were officially organized in wildlife interest groups, and they were on their Wildlife Advisory Board. However, the other 80% were taxpayers, they were voters, and some of them were very influential, as Rich Goulden had pointed out, in making their views known. Some of those people had to be incorporated.

J.D. Roseborough saw as a challenge what Mr. Pope had mentioned in his keynote address, that although they were in close contact with what they called interest or client groups, there was a large percentage of the public that was not represented by anyone. It was a challenge to them to try to communicate with those people, so that they could be involved, not only in understanding the goals, but in goal-setting and review and assessment.

J.Y. Hickman (Canadian Wildlife Federation) thought that he might differ very slightly with his Executive Vice-President, Mr. Brynaert. Possibly his background training would mean that he might be prepared to sit down with anybody in a discussion of the nature that they were considering. He only cautioned the conference about falling into the trap of necessarily trying to seek common ground. It was a good objective, but they had to watch it carefully, because in obtaining that common ground they might not have reached the best solution. He thought it important that they should keep that in mind, because he knew what they were attempting, and could sense the feeling that they were working towards conciliation and team-work and so on. He asked them not to overlook the reasons for which they existed: the betterment of wildlife; and not to lose those principles in trying to seek a political solution because, with all deference, a political solution was not necessarily always the right solution.

RECOMMENDATIONS OF THE 48TH FEDERAL-PROVINCIAL WILDLIFE CONFERENCE

Recommendation No. 1 (Appreciation for hospitality)

That the conference express its appreciation to the Government of Ontario and to the Hon. Alan Pope, John Sloan, Douglas Roseborough, and their staff for the excellent arrangements and hospitality extended to the delegates of the 48th Federal-Provincial Wildlife Conference.

Recommendation No. 2 (Thanks for reception)

That the conference express its appreciation to Environment Canada and the Canadian Wildlife Service for the reception held on the eve of the conference.

Recommendation No. 3 (Thanks for barbecue)

That the conference express its appreciation to the Canadian Wildlife Federation, Ontario Trappers' Association, and the Ontario Federation of Anglers and Hunters for the buffalo and beaver barbecue on Tuesday night.

Recommendation No. 4 (Thanks for breakfast)

That the conference express its appreciation to Ducks Unlimited Canada for its hospitality in hosting a breakfast for all delegates on the morning of 20 June.

Recommendation No. 5 (Appreciation to non-governmental organizations)

That the conference express its appreciation to the non-governmental organizations (NGOs) that have attended the 48th conference and provided valuable participation.

Recommendation No. 6 (Appreciation to D.J. Robinson)

Whereas Don Robinson has for over 30 years contributed actively to wildlife research and management and to the work of the Federal-Provincial Wildlife Conferenc,

therefore the 48th Federal-Provincial Wildlife Conference directs the Secretary to express to Mr. Robinson its appreciation for his service and best wishes for his retirement.

Recommendation No. 7 (Theme for 1985 conference)

Whereas discussions at the 48th Federal-Provincial Wildlife Conference have stressed the importance of communication and support between agencies and users, and

effective communication can lead to essential unity and strength on important wildlife issues, and

communication is an integral fact of team-work and would be a natural outgrowth of the 1984 conference theme, and

previous conference themes have not addressed this important topic, and

wildlife managers, administrators, and users stand to gain from upgrading and insight into communication techniques and processes,

therefore it is recommended that the Federal-Provincial Wildlife Conference adopt as its 1985 theme "Communicating about wildlife".

Recommendation No. 8 (Project WILD)

Whereas the Canadian Wildlife Federation has submitted an in-depth proposal to all resource agencies and a summary report to the Federal-Provincial Wildlife Conference regarding a National Implementation Strategy for Project WILD in Canada,

therefore it is recommended that all provinces and territories, and any interested national NGOs, be encouraged to become full, participating members in the proposed Canadian Project WILD program.

Recommendation No. 9 (Theme for 1985 National Wildlife Week)

The Federal-Provincial Wildlife Conference recommends that the theme for 1985 National Wildlife Week be: "The key to conservation - Responsible stewardship".

Recommendation No. 10 (Guidelines for National Wildlife Week program)

It is recommended that the Federal-Provincial Wildlife Conference accept the report by the committee reviewing the National Wildlife Week program as amended on 19 June 1984 by the committee in consultation with the Canadian Wildlife Federation.

Recommendation No. 11 (Canadian Wildlife Management Institute)

Whereas the Task Force was established under Recommendation No. 12 of the 1982 Federal-Provincial Wildlife Conference, and

whereas not all of the Task Force responsibilities were completed,

therefore it is recommended that the Task Force mandate be extended to the 1985 Federal-Provincial Wildlife Conference; and that a final report be prepared and distributed by 1 January 1985 to all jurisdictions and national NGOs for discussion and decision at the 1985 conference.

Recommendation No. 12 (Canadian Wildlife Management Institute)

It is recommended that the interim Canadian Wildlife Management Institute report be made available to NGOs that request it. It is further recommended that the

Institute Task Force consider seriously what effect Institute fund-raising might have on existing federal/provincial NGOs; and it is further recommended that the Task Force report scheduled for January 1985 also be circulated to NGOs in attendance at this meeting in Timmins.

Recommendation No. 13 (Appreciation to J.E. Bryant)

Whereas Joe Bryant has worked for many years in the interests of wildlife conservation, and

whereas Joe retired last autumn to pursue his dream of studying environmental law;

therefore the 48th Federal-Provincial Wildlife Conference directs the Secretary to express to Mr. Bryant its appreciation for his years of dedicated service, and to wish him well in his ambitious new venture.

Recommendation No. 14 ("Canadian wildlife administration")

Whereas several reviews and assessments of the usefulness of "Canadian wildlife administration" have been conducted since its inception in 1975, and

whereas these reviews have consistently recommended continuance of the journal, with the focus on content on the administrative aspects of wildlife management, and

whereas the evaluation of "Canadian wildlife administration" journal carried out in conjunction with this year's Federal-Provincial Wildlife Conference reaffirmed the foregoing,

therefore it is recommended that:

(1) "Canadian wildlife administration" journal, being as much or more needed today as when introduced in 1975, be continued as a medium for the distribution of information about the administrative aspects of wildlife management in Canada, including wildlife law, regulation, policy, organizational arrangements, personnel directories, and the like,

(2) the editorial policy and publishing specifications (based on reviews and assessments to date) be crystalized for review by all jurisdictions and relevant NGOs, and circulated during 1984-85 with the aim of adoption at the 1985 Federal-Provincial Wildlife Conference,

(3) Manitoba, as the agency that most recently published this journal, be asked to lead this task with assistance to be provided by Canadian Wildlife Service and such other jurisdictions as may be required,

(4) the appropriateness of "Canadian wildlife administration" journal be reviewed if the Federal-Provincial Wildlife Conference, as now conceived, is dissolved in favour of a "Canadian Wildlife Conference", as is presently being considered under sponsorship of a new "Canadian Wildlife Management Institute", and

(5) in keeping with past rotational order for producing this journal, Alberta be requested to undertake publication of the 1985 edition of "Canadian wildlife administration".

Recommendation No. 15 (Forestry/wildlife symposium)

Whereas as a result of Recommendation No. 9 of the 46th conference, a forestry-wildlife symposium was held in British Columbia in the spring of 1984, and

whereas the symposium was judged highly successful in exploring the basic issues in interaction, and fostering understanding among forest and wildlife managers, and

whereas it would be opportune and in the best interests of both wildlife management and forestry to press forward with the exploration and development of integrated technologies, and

whereas the opportunity to do so is being offered by the Province of Ontario,

therefore it is recommended that:

(1) delegates to the conference support such a symposium in Ontario, if possible in the spring of 1986,

(2) the symposium be focused on current research, new forest and wildlife management technologies, and their effects on integrated management practices,

(3) the papers be solicited from recognized experts with an emphasis on forestry professionals, and that the papers be published,

(4) attendance be open,

(5) Ontario selected an organizing committee representing foresters and biologists throughout Canada from federal, provincial, and territorial governments, appropriate NGOs, the forest industry, and the academic community, and

(6) the organizing committee seek required funding from participants with emphasis on independent financing, similar to arrangements for the BC symposium.

Recommendation No. 16 (Team-work guidelines)

Whereas there is a growing need for team-work in identifying opportunities and resolving conflicts in wildlife, and

whereas discussions at the 48th Federal-Provincial Wildlife Conference have led to a good description of the needs, opportunities, and formula for team-work on a variety of matters in wildlife management, and

whereas it is important to all participants at the conference to become more proficient in team-work,

therefore it is recommended that the Ontario Wildlife Branch take a lead role in working with workshop rapporteurs in developing a report on the results of those discussions, and work with the Canadian Wildlife Federation in the design and printing of the report.

Recommendation No. 17 (Subsistence use of wildlife)

Whereas it is essential to maintain a rich and diverse culture in Canada, and

whereas the life-style of subsistence users is threatened by lack of action with respect to some of the value judgements being made at the national and international levels,

therefore it is recommended that the Federal-Provincial Wildlife Conference recognize that subsistence use is a legitimate and important use of wildlife in Canada, and that the life-style of subsistence users is threatened.

Recommendation No. 18 (Dependence of Canadians on hunting and trapping)

Whereas the tactics of certain anti-hunting and anti-trapping groups are disrupting the management of Canadian wildlife resources, as well as the livelihoods and self-respect of native and non-native users, and

whereas it is vital that Canadians and their foreign trading partners are aware of the dependence of many Canadians on hunting and trapping,

therefore it is recommended that this body acknowledge the importance of this matter and that it be communicated to the Chairman of the September 1984 Wildlife Ministers' Conference.

CLOSING REMARKS

Recommendations and an invitation

The Hon. N.J. Cournoyea
Minister
Renewable Resources and Information, NWT

Following the previous session's discussions, I would like to add the following comments on the subject of team-work. I do think that all of us share a common interest when it comes to discussing the threats to the future use of wildlife in Canada. We have become aware of our common goal to ensure that wildlife resources are always there for the use of all Canadians. We also realize the importance of good management of our natural resources, effective land-use planning, habitat management, and pollution control. I believe that the use of wildlife enhances its value. As long as that use is consistent with the principles of conservation, it is in the common interest of everyone here.

With this situation in mind, I have put forward two recommendations on behalf of the Department of Renewable Resources of the Government of the Northwest Territories. These recommendations are:

> Whereas it is essential to maintain a rich and diverse culture in Canada, and
>
> whereas the life-style of subsistence users is threatened by lack of action with respect to some of the value judgements being made at the national and international levels,
>
> therefore be it resolved that the voting delegates recognize that subsistence use is a legitimate and important use of wildlife in Canada, and that the life-style of subsistence users is threatened.

That is our first recommendation. Our second recommendation is:

> Whereas the tactics of the anti-hunting and anti-trapping groups are disrupting the management of Canadian wildlife resources as well as the livelihoods and self-respect of native and non-native users, and
>
> whereas it is vital that Canadians and their foreign trading partners are aware of the dependence of many Canadians on hunting and trapping,
>
> therefore be it resolved that this body suggest that this matter be considered as the first order of business at the meeting of Wildlife Ministers in September 1984.

I hope you will find these recommendations worthy of your consideration. My officials will be available to discuss these matters with you during the remainder of this conference. In closing, on behalf of the Government of the Northwest Territories, I would like to extend an invitation to this conference to hold its 1987 session in the Northwest Territories. I hope that occasion will provide an opportunity to assess progress on these two recommendations. I appreciate the opportunity I have had here to work with you.

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